Cochrane

Review of the Structure and Function of Cochrane Groups

Proposals for Group level change

Contents

Executive Summary

Cochrane's structure and function review started in 2013 and has progressed through a series of exercises looking at the individual Groups. The Cochrane Review Groups (CRGs) were the first Groups considered and a paper resulting from that exercise was discussed in Panama in 2014. The most radical ideas for change in that paper were not accepted at the time, but many of the recommendations have been taken forward since then as pilots, and have been well received by the community. The Centres, Fields, Methods Groups and Consumer Network reviews were undertaken in 2015 and have mostly been completed with the exception of Fields.

This paper goes beyond a 'silo' approach, looking at an organisational level at whether our current configuration of Group types is appropriate for the challenges we are addressing in *Strategy to 2020*? Early ideas were presented to the Cochrane Steering Group (CSG) in Vancouver in January 2016; and this more detailed set of proposals for change was prepared for the CSG's consideration in London in April. The Steering Group approved these proposals for change at that meeting and the next steps will involve engaging with Cochrane collaborators both to obtain buy in for change and to inform further development of the ideas.

The paper sets out a change in the nature of CRGs, such that producing reviews is still their primary interest, but they outsource the editorial processing steps to distinguish between the two functions of development and editorial decision making.

The paper then describes a proposed consolidation of Groups. We want Groups to consolidate for greater efficiency and accountability, but also because we think that Groups operating within a larger framework will be more effective. We propose both strategic level consolidation and operational level consolidation. The latter would mean Groups share financial and human resources to equip the new larger Group in a different way to the current set up.

All of this is underpinned by a change to our functional approach. We have historically had very specific functional requirements of Groups, but now we are proposing to group functions into workstreams which allow flexibility in the functions that Groups undertake - though there will still be a minimum requirement expected of Groups to ensure basic functions are undertaken. A particular benefit of this change is that it will allow Groups to consolidate into hybrid Groups where appropriate; and it will also allow Groups to specialise in certain areas as befits their funding, expertise or other local contexts. However, as with all elements of these proposals, situating the work of Groups within a framework that ensures appropriate accountability is critically important.

The CSG has endorsed these proposals and approved the direction of travel they set out. The Central Executive team (CET) now needs to work up the proposals further with Cochrane community input, which will then be subject to wide consultation, before final implementation plans are established.

Background

Rationale for change

The landscape that existed when Groups were defined

Systematic reviews were new and Cochrane was leading the way in developing the SR concept and methods. Many people were drawn to the cause and came to Cochrane to undertake SRs. From the very beginning there was a fundamental understanding that systematic reviews should be updated as new evidence becomes available.

Building capacity for the production of systematic reviews was an important part of Cochrane's work and there was a strong sense that anyone with the right tools and guidance could undertake a systematic review. These individuals joined together in Cochrane Groups and had strong loyalties to their Groups. As well as producing reviews they were vocal advocates for Cochrane and for the role of SRs in health decision making. The topic coverage was defined by what the authors wanted to do rather than by a prioritised approach.

The **biomedical literature was a lot smaller** than it is now. This meant that the original ambition of a comprehensive database of RCTs was realistic. It also meant that reviews had fewer trials.

The **methods** used initially were cutting edge and revolutionary for their time, although considerably simpler than our current, extensive methods. We focussed on RCTs and reviews of interventions only.

Producing **high quality** reviews has always been important and quality assurance has come from our editorial processes.

In 2000, 47 CRGs produced 289 new reviews and 233 updated reviews.

Cochrane had **little central organisation**. It was reliant on Groups forming and seeking their own funding. The organisation had no master plan for Groups and so grew organically, at a great pace, based on the enthusiasm of Groups and willingness of funders.

Technology was always important to Cochrane. Early on we developed our own software for writing reviews and we have only ever published the Cochrane Library electronically.

How has that landscape changed?

Systematic Reviews are now being undertaken and published by a wide range of groups for academic and commercial purposes. They have become a cornerstone of Evidence Based Medicine and they are published in a wide range of journals including leading medical journals such as *The Lancet* and the *BMJ*. Many more reviews are produced and published outside of Cochrane than inside Cochrane. Our author base is more diverse than ever. Many authors come to us knowing how to perform a basic SR, but there are many complete novices who come to us requiring comprehensive training.

The **methods used in reviews have evolved** to reflect research development in the methodology, often led by Cochrane contributors, and also to reflect the increasing diversity in trial design. The resulting methodology is more extensive, complex and challenging to implement. Furthermore, a broader range of review types are now desired by our users: diagnostic reviews, prognostic reviews, studies of cost effectiveness, inclusion of non-randomised studies, etc.

The **broader healthcare ecosystem has adopted EBM now** and so our work fits in with other schedules, e.g., guidelines development cycles. As a result of this demand drives a lot of our work and reviews need to be produced more rapidly than was previously acceptable.

The nature of capacity building has changed. Many authors come to us knowing how to perform a basic SR, but there are many novices who require comprehensive training, and there is recognition that current systematic review methods require much greater expertise and training. As our community has grown, we are developing new ways to engage people for whom authoring a review is not the best way to contribute, allowing them to contribute in more flexible and valuable ways that suit their skills and interests. This is part of a broader initiative to develop Cochrane membership, which will allow contributors to be part of Cochrane first and foremost rather than a Group.

In addition, we need to keep in mind the need for capacity building in all areas of our organisation, not least for succession planning. Are we recruiting and maintaining enough mid-career researchers who can become the leaders of the future as the original leaders seek to pass on the baton? We need to be thinking strategically about the number and range of such people we wish to attract and responding to that challenge alongside the challenges of capacity development.

We are no longer alone as advocates for the systematic review and for EBM. There are many other organisations also interested in this and so the role of partnerships has increased as we seek to work together to achieve our objectives, e.g., the +AllTrials campaign. We have also seen a major increase in the importance of dissemination and knowledge translation as the information overload takes hold and users constantly tell us that they need Cochrane evidence in more usable formats. Communicating our findings more effectively though knowledge translation, dissemination, summary of findings, translation, etc., is a key part of our continued commitment to ensure Cochrane evidence is used more often in health decision making.

Both to manage the large workload of Groups and to ensure relevance of our work we have had to put **emphasis on priority setting** for review titles. Increasingly we are not seeking to identify review topics by author interest alone, but instead based on prioritised need for evidence. This is fundamental in our *Strategy to 2020* as we seek to produce relevant reviews, so that our effort has the greatest possible impact.

Information overload is a common theme, and it is demonstrated in the state of the biomedical literature. There are a huge number of trials now, many of which have not been synthesised in systematic reviews. As a result, the reviews are bigger (the 20 largest reviews in 2000 included a total of 1,100 studies; the 20 largest reviews in 2016 summarise evidence from 4,827 studies), and the task of creating a comprehensive database of RCTs has become more important and more challenging, which has led to innovation in the methods of undertaking this work (e.g., crowd sourcing, text mining and machine learning).

The **burden of the editorial process has grown** significantly. In 2015 52 CRGs produced 485 new reviews and 455 updated reviews (an 80% increase on 2000). Each of these CRGs has its own editorial process. We are exploring ways of organising editorial processing more efficiently to reduce the burdens on the Groups.

We have a **strong Central Executive** which is well resourced to support the organisation and the Groups.

The role of technology has expanded beyond review writing software. We have more tools now: Covidence, GDT, EPPI reviewer, CRS, etc., and we are exploring ways of automating elements of the SR workflow through machine learning techniques and text mining. In addition, we are in the first phases of implementing linked data tools that will revolutionise much of our SR production processes and publishing abilities.

Key Challenges that this presents

- Sustainability – maintaining existing income and diversifying our income base.
- Becoming more efficient, both in our review writing and our editorial and publishing processes.

- Maintaining quality standards.
- Regaining our place at the cutting edge of methodology; and supporting authors and editorial teams to implement effectively a diverse range of methods.
- Responding to the increased need and requirement for more effective communication of our findings.
- Embracing new technologies to be able to perform our functions better or more efficiently.
- Creating effective accountability mechanisms for 120+ Groups.

How the Group concept needs to change to realign with current landscape

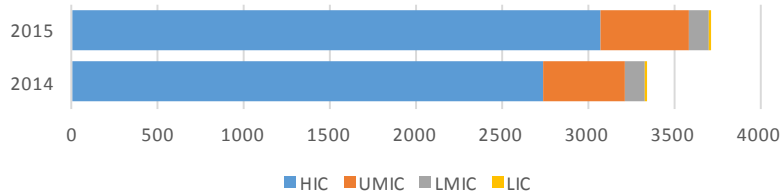
There are many positives about Cochrane's current state that are in our favour, for example:

- As an organisation overall we have an annual income of around £20 million.
- We have some of the leading methodologists in the world working inside Cochrane.
- We have a 'gold standard' reputation in many quarters.

However, there are significant challenges.

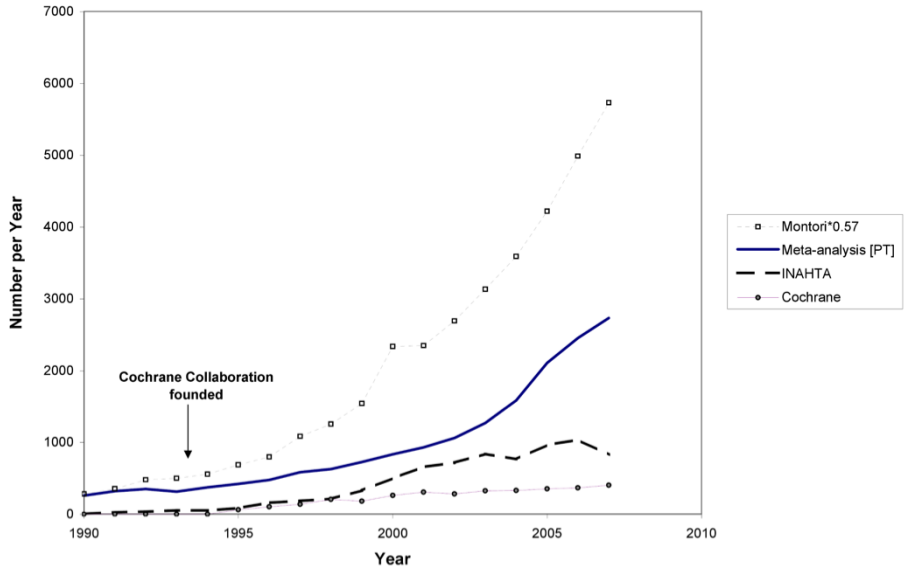
- The Group model we have as our organisational structure doesn't scale well, leaving Groups overburdened and with little flexibility to work in different ways.
- The large number of groups means that adapting to new methodologies, etc., is problematic. For example, how do we develop necessary skills in 52 CRGs for prognosis reviews?
- In addition to this we have been slow to develop positions on certain methodological issues, for example, rapid reviews. Many rapid reviews are commissioned/produced now and we need to have a defined methodology around this so we know what it means to do a Cochrane rapid review and how the methodology needs to respond to the question and the circumstances.
- We are getting slower not faster in the production of systematic reviews. We need to reduce the time taken from Protocol publication to Full Review publication for standard intervention reviews.

- We continue to have a distinct imbalance in authorship, with the majority of authors coming from a High Income background and very few from a Low Income Country. |



- Are we keeping up with demand? In 2000 Bastian et al produced a study that even then showed how trial output is growing exponentially and SR output is growing significantly, yet Cochrane's input is not following the same trajectory. We do not specifically have to follow this trajectory if we are following a rigorous process of prioritisation to ensure our reviews and the most relevant, but we cannot say that is happening with certainty.

The charts for review production and spread of authors are both taken from the Cochrane Dashboard: http://community.cochrane.org/organizational-info/resources/strategy-to-2020/dashboard.



Growth in published trials and systematic reviews. Source: Bastian et al (2010) PLoS Med 7(9):e1000326.

- Coverage is not strategic. There is no one way to measure this, but there are certain factors to consider such as how well we map to the global burden of disease, or to the potential for health benefit (i.e., a focus on areas where there is available evidence). That is not to say we should map our resources exactly in this way, but it does highlight how we have grown based on enthusiasm of individuals to set up Groups and the scope of Groups has therefore been driven by interests of Group members rather than looking at it from a Cochrane-wide perspective. Now is the time to look at it from this angle and re-consider the coverage of topics.

- Some areas of Cochrane activity remain under-resourced, in particular methodological research and implementation, and this remains challenging within current funding structures.

With this in mind we need to think about how we can redefine our Group types to be more flexible to help us approach the challenges we face, for example:

- If we could share resources more efficiently across groups we would be able to organise staffing differently and build shared expertise across Groups.

- Reduce emphasis on capacity building (for CRGs at least), and take full advantage of new pathways into Cochrane through the membership scheme.

- Allow flexibility in Groups both in terms of functions undertaken and the way in which Groups might work together to be more efficient

The CSG considered these issues in Vancouver in January 2016 and there was clear consensus that fewer, more flexible Groups that allow for resources to be shared more efficiently is the way forward.

The impact of Membership

The Cochrane Membership scheme will be in place by the beginning of 2017 and this will significantly change the process of engagement with Cochrane. It will provide a more coordinated way for people to get involved in activities appropriate to their interests, connect with training and build up experience without the current administrative burden on the Review Groups.

Further, our aspiration is that unless those contributors seeking to become authors are ready to take on a review, their training and development would be taken care of within the context of the membership scheme. The importance of this is that it gives the Groups the freedom to change. Consistent with changes in policy that are already beginning among the Groups, supported by the CEU, the Groups will have no obligation to develop author teams to the point of publication. They will always have a supportive, mentoring role with regard to the author teams they work with, but will also be supported by a broader, coordinated membership scheme where newcomers and existing author teams with additional skills needs can be constructively referred.

The Vision guiding these change proposals

We aspire to be the evidence provider of choice for key decision makers with a reputation based on high quality, efficiently produced, relevant evidence syntheses and allied services.

We believe that the current structures and functions of Groups prevent us from achieving this.

To achieve this aspiration, we need a greater focus on high priority, relevant reviews and we need to be more efficient and timely in the production of our reviews. We also need to put more resources into making our evidence accessible through knowledge translation.

We believe this may require a radical shift in the way we go about supporting the production of Cochrane Reviews as well as a major change in the way we structure Cochrane Groups globally to improve accountability, inter-Group collaboration and efficiency.

This document sets out some ideas that we think are worth exploring to help us achieve this.

Key components of this vision

Separation of developmental and editorial functions

A key driver for these changes is to separate developmental and editorial functions in CRGs. This idea has already been raised in the CRG community and certain Groups are interested in piloting such a model. This functional separation would allow for a more focussed role in CRGs and would allow them to be involved more frequently and transparently in review writing, which we hope would provide greater satisfaction in the Groups. This separation would introduce a firewall between authors and editorial decisions, making CRGs mainly responsible for supporting authors whilst editors organise peer review and make the 'accept'/'reject' decisions.

Cochrane Editorial Service

An Editorial Service would provide two key services to the Cochrane Groups, streamlining the editorial process and mitigating issues around authors editing their own work.

The first element would be a **Review Registration Service**. This service would work in conjunction with Cochrane Groups to register new titles for Groups, but it would also have a role in deciding whether to pursue manuscripts that are sent as completed Reviews outside of the Group process.

The second element would be an **Editorial Processing Service**. This would allow Groups to hand over responsibility for editorial processing, allowing them to focus on developing the reviews either as facilitators or as co-authors. This will allow more dedicated support for high priority reviews.

Consolidation of Groups under thematic or geographic boards

For reasons of accountability and efficiency we would like to work towards a system of larger Groups in Cochrane rather than the current 120+ small Groups.

This may involve operational consolidation of Groups where there are potential efficiency gains, but in many instances it may be a strategic consolidation whereby Groups come together in a certain area (thematic or geographic) and are accountable through that route.

Thematic Groups may be in areas such as Oncology, Women and Child's Health, ENT, etc.; and Geographic Groups may be areas such as North America, Europe, etc.

Flexibility in the functions of Groups

As we alter the role of Groups we want to allow a lot more flexibility in relation to what they can do. Groups would still have core responsibilities depending on their Group type, but we want to allow Groups to merge or develop to take on new areas of work that would be traditionally outside of their remit, allowing them to meet their objectives better.

Knowledge Translation (KT)

As part of the *Strategy to 2020* we have committed to make our reviews more accessible and useful both in terms of open access commitments and in making the evidence useable for stakeholders. Knowledge translation covers a vast range of work that is undertaken to facilitate the transition of evidence from reviews into policy and practice. Knowledge translation is an area of work that is applicable to almost everyone working in Cochrane and is a core workstreams for Centres, Fields and CRGs.

However, we do not have a good understanding of what we want to achieve through knowledge translation, so we are establishing a Cochrane Knowledge Translation strategy to help guide us. This will no doubt necessitate further changes to Cochrane's structure and ways of doing things, though in many cases it will be refinement rather than radical changes. The one exception may be the future form and function of Fields. Knowledge translation is a critical

companion to the work of review production and should be one of Cochrane's top priorities in the next decade; and we must ensure that the eventual organizational shape and ways of working ensure KT is delivered effectively.

What will content producing Groups be doing in future?

The Group role under this model will be more explicitly focused on the whole lifecycle of a small portfolio of high priority reviews. This will involve priority setting, co-producing or facilitating review production, and knowledge translation and dissemination; but it will not involve editorial processing tasks. This will align better with academic incentives as Groups will be able to co-author far more regularly, but more importantly it will allow them to shift their focus to working only with high priority reviews. Any author wanting to work on a title outside of the established priority areas would have to approach Cochrane through a new journal style submission process.

The Groups will still play a role in the process for any centrally submitted reviews, as the content expertise of their editors will always be essential to maintaining our high quality process.

The Cochrane Knowledge Translation strategy will provide direction on what it means to undertake knowledge translation work, and so will be critical to the final configuration of this vision.

Potential impact of this vision: reviews that matter will be completed quicker

This change could have a radical impact on Cochrane. At a Group level we would be rejecting low priority reviews and accelerating the process for high priority reviews. By doing so we would be focussing more resources on ensuring that the most important reviews are being undertaken by skilled and well-supported teams. With more resources focussed on them they will be completed more rapidly.

In addition, managing a large portfolio of reviews that are not all high priority will no longer be draining the team members' time and so they will no longer impact on our ability to publish the most relevant reviews in a timely fashion.

Does every Group have to change for us to gain from this model?

There is an inherent caveat to these ideas: that they need to be piloted and evaluated before we can be sure that they will provide the gains we foresee. However, the separation of editorial and developmental functions could work for a subset of Groups as well as for all Groups, so if we decided to pursue this model we would still see gains even if it was not mandated for all Groups.

On the other hand, the changes relating to Group consolidation which see new lines of accountability being assigned need to be embraced by all Groups to be useful. They could be tested in certain areas first, but this is ultimately a system change and so it cannot be done in part.

Cochrane Editorial Service

Review Registration Service

A Review Registration Service would allow us to support the Groups with registering new titles in such a way that we could ease their workload in this area. The service would not have the required content expertise to make all decisions, but they would be able to assess the credentials of author teams and do some general checks on the relevance of the title and how it fits with existing portfolios. If a submission is of good quality the Group could then be engaged to discuss the title further and, if relevant, for the Group to take on the title.

The other element of this service would be opening up the door for assessing completed review submissions. This would enable us to maintain two separate routes for publishing in the Cochrane Library. This new process would allow reviews to be submitted as final versions for peer review as happens with most journals. Following a satisfactory internal editor review and external peer review the article can be published. For Cochrane this process would require some nuances. We would stipulate the following of submissions:

- The review must have a pre-registered protocol on a database such as PROSPERO
- The review must meet the MECIR standards
- The review must be completed in RevMan[1]

When submitted Reviews would first be checked against existing titles for duplication, and then they would be considered according the the above requirements. Reviews that are deemed of sufficient quality to be considered for peer review will then be assessed by an editor. At this stage the relevant Cochrane Group may be invited to join the process to bring their expertise. If the Review is answering a relevant question, and has met all of the quality criteria, it will be sent for peer review using the Editorial Processing Service (see below).

As part of this process we will take full advantage of the content expertise of the relevant CRGs to help with decision making.

Final submission mechanisms in the existing Group structure

Whilst we have set out the idea here that the new method of final submission would go through the Editorial Processing Service, it is also compatible with our current Group structure. High performing teams who feel they do not need the developmental support of the CRGs may opt for this route. Equally, titles or author teams that the CRG has not elected to support could be advised to develop their review outside of Cochrane and submit a final review to the CRG through such a mechanism.

Regardless of what happens in relation to the other ideas in this section we should find a way to allow for this approach in the existing Group model, as the developmental support of CRGs is not desired or required by all.

Impact of this change

Groups would be focussing more resources on a smaller portfolio of high priority, relevant reviews, which will allow them to produce these reviews more rapidly.

Reviews that are not a priority would not require the level of resourcing from Groups that is currently applied, but at the same time equitable and fair editorial channels would remain open for any prospective author team.

[1] Introducing this final submission model creates some complexity with regard to charging for our tools. We would be charging authors who are not working with the Groups for the use of our tools, but those who work with Groups would get free access to tools such as Covidence and RevMan.

However, at the same time we could potentially be increasing our review outputs by offering the new final submission route, as this will open up Cochrane as a publisher to other high quality systematic reviews that are currently published elsewhere.

There is a risk that this very open channel for submissions may become flooded with submissions. This is a risk we would have to manage, but some principles will have to apply: most importantly, prompt rejection processes for reviews that are clearly lacking in some way.

Editorial Processing Service

Here we present one configuration of this proposed service. We don't think this is the only way, but as part of this overall vision for change we thought it was important to work up an example of how we might configure this service. We will need to test these ideas to establish what sort of roles are needed and how many people perform each role before we have certainty on the configuration.

In this vision of Cochrane's future, we are proposing that editorial processing and publishing is handled by a separated Editorial Processing Service rather than at Group level, so that the CRGs can focus their attention on developing the reviews and supporting the authors. CRGs have a very wide remit (from author support, editing, editorial assessment, editorial processing, publishing, dissemination, knowledge translation, stakeholder liaison, etc.) so it makes sense to move some responsibilities to a separate service if it helps Groups focus their efforts.

Any element that is moved to a unified service needs to be something that is going to work well at scale. Editorial processing has been shown to work well at scale in other publishing houses. Furthermore, once this workstream is removed it leaves a more coherent package of workstreams that are well suited to the expertise and incentives of a Group (e.g., a greater focus on content, more authoring roles leading to publishing opportunities and thus academic credit).

The Groups would still have a role in supporting the reviews they are responsible for and it would be expected that anything that comes in to the Editorial Processing Service from the Groups will be of high quality and will already meet all of the MECIR standards. Ideally it should only require a quick check from an editor and then peer review.

The benefits to Cochrane Groups include:

- Permitting people who have limited time to concentrate on the areas they enjoy and are fulfilling;
- Avoiding the perception that the same team of editors are contributing to the review and signing it off – separating these functions also avoids ghost writing;
- Streamlining the process;
- CRGs would be freed up to focus on producing reviews and so could put more emphasis on SR or other skills in the team;
- Groups would be more involved in review production and would be co-authoring more reviews, which would align better with academic incentives;
- Other Groups, such as Fields - who currently don't have editorial processing skills or expertise - could become review producers, where appropriate, without having to recruit an editorial team.

The benefits to Cochrane organisation-wide are:

- We would have one unified editorial process, which would be more efficient.
- We would be able to employ a more diverse range of specialist staff in Groups.

The process

The process at the Editorial Processing Service would be CEU Editor review followed by peer review. The Editor review would be similar to what currently

happens at screening stage, and would require that level of staff member to undertake the task. There would certainly be a role for Group Editors to work across the Groups and the Editorial Processing Service, and so we would be actively supporting the Groups to maintain and develop their individual Editor groups. This connection at the topic level would provide the relevant expertise to select peer reviews and make judgements on content issues that arise in the editorial review process. The exact nature of the Group Editor role would need to be defined further, but it is likely that this will be critical to the success of the Editorial Processing Service, as it would be unsustainable to build that sort of expertise within the service.

Once the review is deemed adequate for peer review it would be handed over to another part of the team dedicated to managing the peer review process. These Managing Editors/Assistant Managing Editors and Editorial Assistants would manage all peer review activity. They would be given name suggestions from Group Editors but otherwise they would manage the whole peer review process themselves. Given that this team would be dedicated to the task of editorial processing and not undertaking other roles such as editing reviews, etc., the team would be relatively small. As with other elements though we would need to test the concept to work out exact staffing numbers required, so the numbers indicated below for each role are indicative only. Through pilot phases we would establish what level of resourcing would actually be necessary, and so we will be able to tighten up any estimates. The numbers are important, however, in demonstrating the possible hierarchy of roles, i.e., this unit would be explicitly configured in such a way that there are options for career progression.

Cost

The Editorial Processing Service would have to be supported in part by funds that would otherwise go to the Groups. This would reflect the reduction in work resulting from the introduction of the service.

However, there are many Groups that wouldn't be able to contribute in any way as they are currently under-resourced. This would also apply to Fields, for example, who wish to support reviews but not provide editorial processing, so we need to consider this carefully once we have estimated the costs based on pilot activity.

Many other journals cover their costs through article processing charges (APCs). For the final submission model there could be some consideration of an APC charge for submissions, but that would probably mean we would have to offer Gold open access rights, which would see a surge in Gold OA publications on the Library. This would need to be considered in more detail.

Location

Whilst this would be one, unified service it does not mean that it would consist of people sat in Cochrane's Central Executive London Office. There may be opportunities for existing Group staff who would remain physically located with their Groups, or there may be hubs around the world. In fact, given that infrastructure funds have to be spent in the country of origin it will be important to set up this unit in a geographically dispersed way to enable access to funding already in place. For instance, a UK unit could be funded from NIHR infrastructure money; an Australian unit could be funded from NHMRC money, etc., but they would all report to the CEU and each unit would probably need a Senior ME and a small team of MEs/AMEs/EAs.

Another option to consider would be for Consolidated Groups to have their own editorial processing team: e.g. six Groups coming together might have one unified team for editorial processing. This team would be accountable to the CEU whilst still employed by the Groups.

The Editorial Processing Service team could be configured in the following way:

Quality Assurance		Editorial Processing		
Editor	**Assistant Editor**	**Lead/Senior Managing Editor**	**Managing Editors (MEs)**	**Assistant Managing Editors and Editorial Assistants**
Quality appraise new submissions (in the way the current screening team does) Provide advice to editorial processing team on quality/methodology issues Whilst these editors would provide a review of manuscripts they would not be able to take the 'Editor' role for all elements of all pieces of work. We would fundamentally be working on a system of a limited number of paid editors who are general editors and then a large team of volunteer specialist editors accessed through the Group system.	Support the Editors in their work. All work undertaken by assistant editors would be quality checked by an editor, so this would be a good training role.	Take responsibility for the editorial processing. Resolve any challenges that arise. Ensure spread of workload amongst editorial processing team.	Take responsibility for a broad portfolio of Groups. Be the point of contact for each of those portfolios Make decisions on peer reviewers to contact based on Group Editor recommendations	Support the work of the MEs by maintaining workflows, chasing peer reviewers, authors etc. and generally providing administrative support to ensure the submissions move through the process in a timely fashion. These roles would be good training roles. New recruits could start as EAs and progress to AMEs as appropriate. They would then build up skills to take on a ME position in time.

Group Consolidation Approach

In Vancouver the CSG agreed that it would be optimal to consolidate the number of Groups in Cochrane. This would lead to a more efficient organisation and better overall management of Groups.

Group Consolidation: Fewer, Larger Groups – The Rationale

As we have explored new ways of configuring Cochrane Groups one thing has become apparent: fewer, larger Cochrane Groups would be better for Cochrane in future.

Consolidation of Groups is possible in two ways which, in this paper, we refer to as consolidation on a **strategic level** and on an **operational level**. Strategic level consolidation is proposed as a mandatory step for all Groups as it is a whole system change. Operational level consolidation has real potential to improve efficiency by redistributing financial and human resources, but it does not necessarily have to be a mandatory step for all Groups.

Consolidation does not mean loss of Identity. Whilst Group consolidation should lead to cohesive larger Groups, we see no reason why Groups should lose their identity through consolidating with other Groups. The important point is that Groups need to sit within a larger Group framework for support, mentorship, accountability and efficiency. That doesn't mean that the essential units need to be lost: in fact, there may be Groups that want to split into multiple smaller Groups, each with their own editorial boards. This fragmentation would currently be problematic, but in this proposed structure that would be fine as the larger Group structure would allow for that.

We envisage that current Groups could be able to retain their Group name and identity and still operate as part of a larger group, regardless of how deeply integrated the Groups become. There may be Groups who wish to consolidate completely and use one new name for the collective Group, which will also be completely acceptable, but this will not be a requirement.

Why do we think we need to explore Group consolidation

A strategic level consolidation of Groups would see all Cochrane Groups fitting into a new framework which is either geographic or thematic. Whilst Groups could remain operationally independent in these larger Groups, they would be required to be accountable to Cochrane through these Groups. This will improve accountability and collaboration between Groups. It will also introduce a management layer above Groups that can take responsibility for the overall work of those Groups. This, in its simplest form, means reporting as a collective unit, but it also means issues such as quality control concerns could be managed at the Group level through the mentorship and support mechanisms in place internally.

For Geographic Groups we do not envisage the same efficiencies from operational consolidation as we expect from thematic Groups, but consolidation by region would help provide a better system of support, inter-Group collaboration and mentorship, as well as an improved accountability process.

Key benefits of consolidation include:

- More flexible resourcing;
- Better external presentation;
- Improved accountability mechanisms;
- Improved adaptability;
- Better access to relevant expertise and skills;
- Burden on individual Groups should be reduced;
- More graduated roles in Cochrane Groups would allow for career progression opportunities.

Our aspiration is that Cochrane Review Groups would consolidate under these new thematic Groups in such a way that they would, in time, start sharing

resources (both human and financial). We believe that such consolidation would lead to efficiencies in the teams and improved topic coverage. The efficiencies would mostly come from the fact that the combined resources would allow the Groups to make creative decisions around how they resource themselves in future. For example, one Group with limited funds may only have resources sufficient for two staff members. However, if it shared resources with another three Groups and so had eight staff positions to fill the combined Groups could be creative about how they appointed staff: e.g., they could choose to appoint other roles in addition to ME/Information Specialist capacity such as systematic reviewers, methodologists, statisticians and knowledge translation specialists.

Accountability

We want to **reduce the lines of accountability** as part of the Group consolidation process. This means that within larger/consolidated Groups we would establish a single point of contact for accountability purposes.

Accountability will still be ultimately to the CEO or EIC. Thematic Groups will report to the EIC and Geographic Groups/Networks report to the CEO.

If a Geographic Network includes a thematic Group it would have a dotted line accountability to the EIC, as fundamentally the EIC takes ultimate responsibility for our content.

We hope that having fewer Groups reporting directly to the Central Organisation will mean that that reporting relationships become more valuable and in depth in a way that is not currently possible with 120+ Groups.

Strategic Consolidation

This would see Groups consolidating along strategic lines but still continuing to duplicate workstreams within each Group. This would provide better coherency to our outward presentation of Cochrane thematically, and it would also provide for a better accountability framework. Most importantly it should promote better collaboration between Groups working in a given area.

At the 2014 Colloquium in Hyderabad the CRG S&F proposal around clustering Groups was opposed by some Co-Eds and was therefore not pursued. Whilst the fundamental rationale and proposal are similar, these proposals are more developed here because we are convinced that this approach deserves to be reconsidered.

Mandatory accountability layer

Overarching Thematic/Geographic Boards would be mandatory: e.g., Women's and Child Health or a Cochrane Europe Board. They would act as a management/accountability layer, and would represent Group consolidation at a strategic level (as opposed to an operational level).

Features/benefits might include:

- Board comprising Co-eds/Directors of Groups, including Satellite Leads where appropriate.
- Elected chair of the Board standing for a two-year term (Chair would need dedicated time).
- Mandate to improve collaboration between Groups through a shared workplan for their thematic or geographic area, including work on standardisation between Groups.

Roles and responsibilities might include:

- External presentation of Cochrane could be curated by these Boards: e.g., editorials, or curated collections of reviews.
- Joint partnership development/ stakeholder liaison work with charities and policy makers, guideline developers, etc.
- Joint knowledge translation and dissemination programme.
- Participation in training and development programmes as a group: i.e., editor training will be delivered to the Group as a whole not to the individual Groups.
- Shared resources that are not needed in each group: e.g., DTA editors, content editors, statisticians, methodologists, etc.
- Title registration and scope consideration (i.e., which Group will lead support for relevant author teams).
- Joint funding applications.
- Would report to Cochrane as a collective Group providing the opportunity for a more meaningful support and accountability relationship with Cochrane's central organisation.

Ideally…

We want Groups to share financial and human resources to organise themselves differently to achieve better efficiency and a broader range of roles at the Group level. These Boards would serve as a way of starting the inter-Group interactions, which will hopefully lead to deeper operational integrations between Groups including sharing of resources.

Strategic Consolidation: Thematic Boards

For the purposes of bringing a more strategic approach to Cochrane's topic coverage we think thematic Boards would help us bring together Groups working in similar topic areas and provide more comprehensive coverage.

Thematic Boards

We think that situating Groups in a framework of other Groups through which they are mutually supporting one another and are collectively accountable to Cochrane is a big improvement on the highly fragmented situation we are in currently.

We also think that by bringing Groups together in this way we might improve the external coherence of our topic organisation, which currently is confusing (some Groups have broad scopes, some are very narrow; certain areas of healthcare have multiple Groups; Cochrane's ad hoc, fragmentary organisational structure presented to the world differs significantly from how people are used to being presented with healthcare, for instance, in hospital departments).

By creating these thematic Boards, we hope that Groups would start working together on a strategic level and would be able to make a much more coherent external presence for their area of health care. This may manifest itself as new journals within Cochrane, or some other form of packaging reviews in given thematic areas.

Ideally we hope that this collaboration at the strategic level would lead to a structural framework for operational level Group consolidation, which is covered in the next section.

Alternatives to Thematic Boards

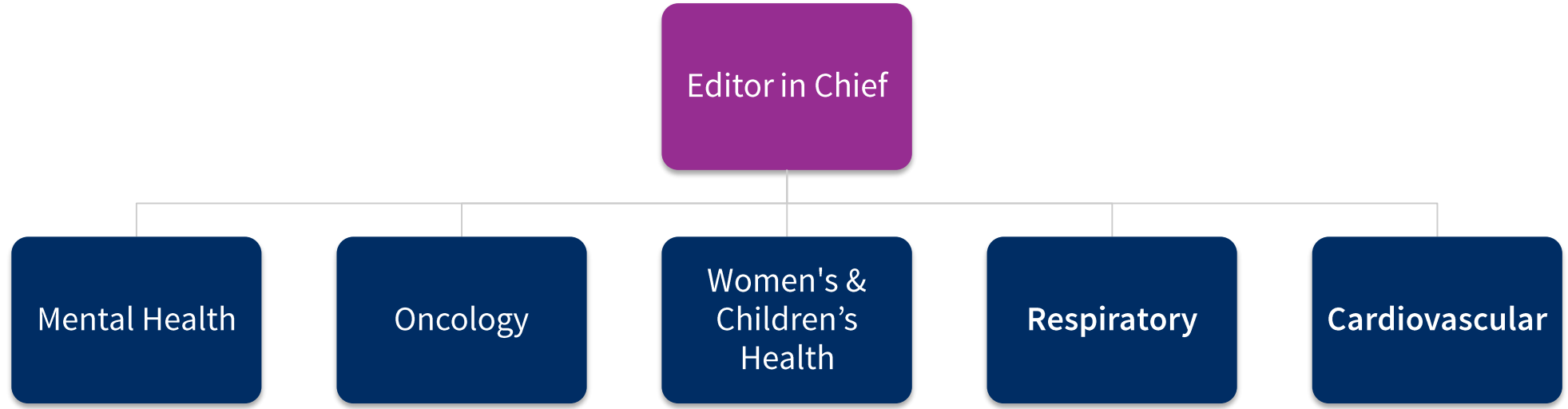
Whilst we think that thematic boards are the optimal way to go about consolidation; we have not entirely discounted a geographic consolidation amongst thematic groups.

The benefits for consolidating thematic Groups by location are different from the benefits of consolidating by topic area, and such a system might open up better interactions with Cochrane's Geographic Groups.

The argument for consolidating by location would be that content knowledge, whilst important, is only a part of the whole picture and many Group staff members have worked across multiple Groups. If Groups were linked by location they would be more likely to share staff and other resources, which could make them more efficient.

The local Cochrane Centre could provide some degree of leadership in such a model but it wouldn't be a requirement. Such a model could work in some countries or regions where there are clusters of Groups, but not necessarily in all.

Here are some possible examples of high level thematic boards:



Mental Health	Oncology	Women's & Children's Health	Respiratory	Cardiovascular
Common Mental Disorders	Gynae Cancer	Pregnancy and childbirth	ENT	Stroke
Schizophrenia	Neuro-oncology	Gynaecology and fertility	Airways	Heart
Dementia	Haematological malignancies	Child Health	ARI	Vascular
CDPLPG	Colorectal			Hypertension
Drugs and Alcohol	Childhood			
	Breast			

These are **examples** of how Groups could work together as thematic Boards. There will always be challenges in creating a coherent thematic framework so we will need to be pragmatic about how Groups join together.

It is going to be something like the above, but we are not looking at the exact groupings at this stage.

Strategic Consolidation: Geographic Boards

All of the above has been focussed on consolidation around thematic groupings, but we also have an increasingly large number of Geographic Groups. We could adopt a similar approach for our geographic presence in terms of strategic consolidation for the purposes of shared learning, more efficient use of resources and better accountability.

The Centres S&F paper has already created a clearer structural framework where Groups can start out as small Affiliates and then grow to become Centres. It also confirmed support for the Network concept piloted by the Iberoamerican Centre. This full network approach won't be appropriate for all areas but it could be adopted broadly to some degree in the same way as the strategic level consolidation of thematic Groups above.

As with the thematic Groups each region would have a Board comprised of Directors from the region with a rotating Chair. The Centres would have a shared strategic plan and accountability to Cochrane would be through that Board.

We could base these groupings on the WHO Regional Office[2] groupings: i.e., Africa; Americas; South-East Asia; Europe; Eastern Mediterranean; and the Western Pacific.

Whilst some countries may find operational consolidation to be useful, it is less likely that this will bring particular efficiencies amongst these Groups so the focus is on strategic consolidation and a better layer of accountability through which Centres, Associated Centres (Branches) and Affiliates can report.

Adapting the WHO groupings to suit Cochrane's geographic presence our broad groupings for Networks could be:

- North America
- South America
- Europe
- Eastern Mediterranean
- Africa
- Western Pacific and SE Asia

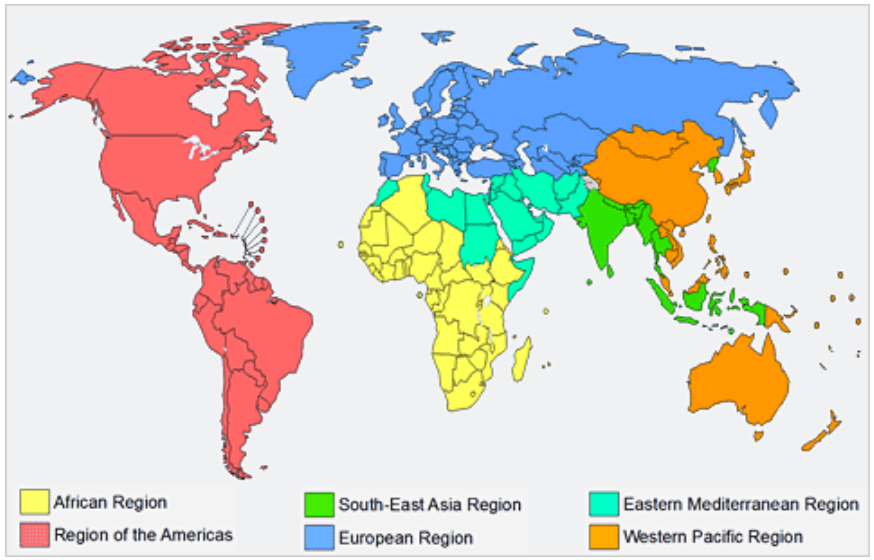


Image from WHO website (see footnote for URL) showing WHO regional grouping

[2] http://www.who.int/about/regions/en/

Interconnections between Geographic and Thematic Groups

The models set out here look at integration between Groups with a clear differentiation between Geographic Groups and Thematic Groups. However, we do not want to create a gulf between these two Group types. Instead we are looking to create a structure whereby there is good interaction between Groups and easy collaboration.

We don't think that a fully geographic structure is right for Cochrane. Such a structure would require all Groups in a given region to report to Cochrane as part of their Country Group. There is insufficient rationale to make such a disruptive change, but in exploring this possibility some benefits of closer ties between the two Group types emerged.

We think that to have a more coordinated presence at a local level it makes sense for Groups in any given country to work together closely. This may have benefits in terms of efficiency of operations, but it may also be helpful at the strategic level: for instance, working together to diversify the Cochrane funding base in a country; supporting fellow Groups in the country when there are funding shortages; representing or communicating Cochrane and our evidence outputs more effectively; or building links with local stakeholders and key partners jointly rather than independently.

Closer interconnections between Groups operating in the same country or region would be beneficial and should be explored.

Operational Consolidation: Deeper integration of Groups

This second stage of consolidation is focused around making changes on the operational level that see certain (or all) workstreams undertaken jointly rather than running every workstream in parallel across the Groups. Broadly speaking there would be two levels of further consolidation, which represent lesser or greater degrees of operational consolidation.

Option A: Consolidation whilst retaining identity and some duplicated workstreams

Groups within a thematic Board area (see above) would build closer ties in their day-to-day operations. This would include joining together one or more workstreams that are duplicated across the Groups: e.g.:

- Pooling some resources so that one Group can recruit a communications professional or someone specialising in KT who can work across the Groups.
- Working to a shared stakeholder engagement plan as a collective group, with each Group having a share of the workload in achieving the plan but working on behalf of all Groups in their thematic board.
- Sharing the Information Specialist resource across the Groups so that, for example, one Group could have an Information Specialist who focuses exclusively on linked data associated work for all of the Groups and the other Information Specialists share the searching support work between them.
- Working to a common business plan.

Under this option **Groups would still retain their individual identities**, but they would reorganise in a way that allows the collective Group to be more efficient.

Option B: Merger of groups resulting in one group with no duplication of workstreams

Under this option Groups would merge entirely to form a new entity with a new external presence and the individual Groups would no longer exist.

This option may happen for various reasons. Groups may feel stronger working together under a more generally understood Group name. Alternatively, it may happen where a Group fails for some reason (e.g., funding cuts) and is taken over by another Group expanding its scope.

Given the comprehensive nature of this change it would, of course, allow for complete reorganisation of financial and human resources that would be managed as one in the new Group. Likewise all other work would be managed as a single programme of work.

Optimal Group Size

We don't know exactly what is the optimal Group size and it may vary by topic area as some CRGs are already very large in scope and others are very narrow. We need to test this through pilot areas to establish the factors in this decision.

Flexible Functional approach

Flexible functions

We want to allow for flexibility in the way Groups work by allowing a choice of workstreams that can be undertaken by Groups. These will generally cover a collection of functional activities that need to be performed for Cochrane to operate. Groups will not be limited to certain workstreams, but instead they will be able to select from any workstreams they wish to undertake. However, broadly speaking the workstreams will be either thematic or geographic in nature. This proposal can stand-alone and be implemented regardless of whether the proposals set out in the rest of this paper are accepted, but it does work well in support of more dynamic Group types.

Currently a lot of expertise is 'locked up' within group types. For example, there may be skills and expertise sitting within Fields that are never taken advantage of by CRGs, or there may be Methods Groups located near to other Groups which don't engage with one another, thus missing an opportunity to share knowledge or gain efficiencies.

We believe a more flexible system of Groups that allows for hybrid Groups to be created would be beneficial and would make consolidation of Groups more attractive. Creating consolidated Groups is more than just bolting together existing Groups and instead represents an opportunity for them to look jointly at the functions they should or could collectively fulfil. Such an approach would not be possible under the current strict Group type definitions.

There have been examples of necessity driving this approach in the past: for example, the DTA group was more than a methods group as it expanded into providing editorial services for DTA reviews so that CRGs could effectively outsource the review of the methodology to that Group. Novel ways of dealing with challenges of taking on new methods or other changes will necessitate removal of these Group boundaries if we are to respond to change.

Workstreams

In this paper we outline 'workstreams' which are a collection of functions that we would expect from Groups. We are working on the premise that any Group can apply to take on workstreams that are outside their standard remit if they wish. There would be an assessment process in place to avoid unnecessary duplication of effort.

Components

Each workstream has various components, and it is expected that not all Groups would perform all components of all chosen workstreams. We would rate components as essential or desirable to ensure sufficient coverage in certain areas. As Groups develop they could, if possible and desirable, gradually expand their portfolio of work by increasing their activity in particular workstreams.

Specialisms

We would also support high performing Groups choosing to specialise in certain workstreams. This might mean that they do not perform a full range of other functions, but they would go above and beyond the standard expectations in their specialist workstream.

Hybrid Groups

Currently we have a rigid view of Groups, but in future we could have a more flexible view that means Groups can form along different lines to meet the specific needs of their stakeholders. This is also important where Groups may merge, as they could be creative in setting out their proposed objectives and building a workplan that best suits delivering those objectives. This is particularly relevant where multiple Groups that are not of the same Group type come together.

Core Thematic Workstreams

Review topic decision making	Information retrieval and management	Author support
- Undertake prioritisation exercises to identify review priorities in a given subject area - Register new titles to author teams who will be support by the Group.	- Provide support to the development of search methodology; run searches; and provide editorial review of search methodology in completed reviews - Contribute to the development of CENTRAL by undertaking searching of topic specific sources - Enriching study and reference core information and metadata in CRS - Data curation and annotation in support of PICO linked data - Provide governance over Cochrane's enterprise metadata and ontologies - Provide input into core requirements for information retrieval in our products	- Support authors with practical advice on undertaking Cochrane Reviews - Support authors with methodological or other specialist advice - Provide mentorship for authors where resources permit and appropriate - Assist author teams in a co-authoring capacity where useful and where the relevance of the topic merits such involvement

Core Thematic Workstreams (continued)

Knowledge translation and dissemination	Stakeholder engagement	Editorial processing and publishing[3]
- Maintain a programme of work around Knowledge translation tailored to the thematic area - Maintain a standard dissemination workflow linked to the review production workflow - Wherever possible engage with review specific KT opportunities such as podcasts and other re-packaging of reviews	- Build partnerships with key stakeholders to improve knowledge exchange and dissemination of Cochrane Evidence - Maintain active lists of stakeholders to improve dissemination of reviews - Deliver education programmes that encourage stakeholders to make better use of Cochrane evidence	- Maintain a community of Editors capable of contributing to the review of manuscripts in the editorial process - Manage editorial and peer review of manuscripts - Provide publishing services including arranging copyediting, annotating reviews, and publishing in Archie - Manage interactions with authors, including consolidating and explaining comments and ensuring they are dealt with.

[3] We envisage that most Groups would subscribe to the Editorial Processing Service and so this would not be a function for them. We would not mandate use of such a service though, as where certain high performing Groups are highly efficient there may be no gain.

Core Geographic Workstreams

Representation, Promotion & Advocacy	Training	Translation	Knowledge translation & dissemination
- Promote Cochrane and its work - Be Cochrane's official 'Representatives' in the country in accordance with Cochrane's spokesperson policy - Host local events such as country or regional symposia that promote the work of Cochrane, actively develop the contributor base, and build stakeholder links. - To maintain a country advocacy programme in support of Cochrane's mission, profile and agenda and provide a country voice for campaigns Cochrane is involved in. - To provide a channel to local media and communications for promotion of Cochrane evidence and activities	- Provide or facilitate training and support for authors, editors, trainers and other contributors (in collaboration with Cochrane's L&S Department). - Provide mentorship and support for local authors (to the degree that resources permit)	- Lead or support translation initiatives to increase the accessibility of Cochrane Evidence in other languages - Lead or support translation initiatives to increase the accessibility of Cochrane organisational documents - Lead or support translation initiatives to increase the accessibility of Cochrane methodological resources	- Maintain a programme of work around Knowledge translation and dissemination specific to the needs of the geographic region - Build local partnerships with key stakeholders to improve knowledge exchange, dissemination and to inform Cochrane's review priority setting - Deliver education programmes locally to encourage stakeholders to make better use of Cochrane evidence

Workstreams Available to all Groups

Methodological Research[4]	Consumer engagement	Methodological & Statistical Support	Membership Development	Sustainability
- Undertake or contribute to methodological or other research supporting improved production or use of synthesised evidence.	- Support consumer engagement by hosting / supporting a 'Consumer Champion' - Maintain a programme of work around involving or communicating with consumers of healthcare.	- Host a member of the Cochrane Methods Support Service (competitive process required) - To provide methods support for a specific area of methodology relevant to the Group's remit - Provide access to methods experts in the Group's remit where appropriate	- To support and develop the community of Cochrane members in a country, region or topic area - Through capacity building initiatives increase participation in Cochrane in under represented countries	- To take responsibility for the expansion and diversification of the funding base of Cochrane work in a given country or thematic area - Through ongoing capacity building initiatives ensure that Cochrane recruits and retains brilliant people to provide future leaders of our organisation

[4] Methodological research is fundamentally a thematic workstream rather than geographic, but many geographic Centres rely on Methods research funding to support their work as a Centre, hence why it fits in both dimensions.

How Cochrane's current Group structure fits with these proposals

CRGs

The proposals set out here are a significant shift in the way CRGs operate. The separation of editorial and development functions - with the former being divested and becoming part of a separate service - would see a major shift in the focus of CRGs, and so would require a different pattern of resourcing as CRGs would want their staff to be more focussed on author support and review writing instead of focusing on editorial/publishing skills. Their existing staff members who have these editorial/publishing skills could move to the Editorial Processing Service; but no change in location would be required.

The Thematic Consolidation would require CRGs to work more closely with other Groups and share resources such as methodologists, editors, statisticians, etc. We expect that the gains from working together would far outweigh the challenges, such as having a shared stakeholder liaison programme or applying for funding opportunities jointly.

On an operational level the potential to resource teams differently as a result of pooling financial and human resources is very appealing, as it would put new skills within reach of the teams (e.g., knowledge translation) that could help with getting evidence into practice.

If all of the proposals were adopted the CRGs would be focusing their time on producing reviews and facilitating others working on high priority reviews.

They would still need Information Specialists in their teams and they would need some sort of Managing Editor (ME). The ME role, however, would be more focussed on providing detailed support to author teams and so would be more methodological in its focus (as it is in some Groups already). For reviews the team are not actively working on as authors they would still be editing reviews and ensuring MECIR standards are met, so that when submitted to the Editorial Processing Service the review is as good as it can be and should be ready for peer review.

Group Editors will always be important to Cochrane as we need this core Group of experts in the many Fields we cover. They would still have a core role at Group level as authors and mentors for other author teams, but they would also have a role with the Editorial Processing Service, in providing the required content specific expertise as and when required.

Fundamentally the change will be that Groups spend less time on administrative tasks and peer reviewing and more time on supporting/project managing authors proactively and writing some reviews in house to ensure that the most important reviews are done well and as efficiently as possible.

The more operational level consolidation that happens at Group level the more the Groups will change, as they introduce new skills and expertise to their staff.

Centres

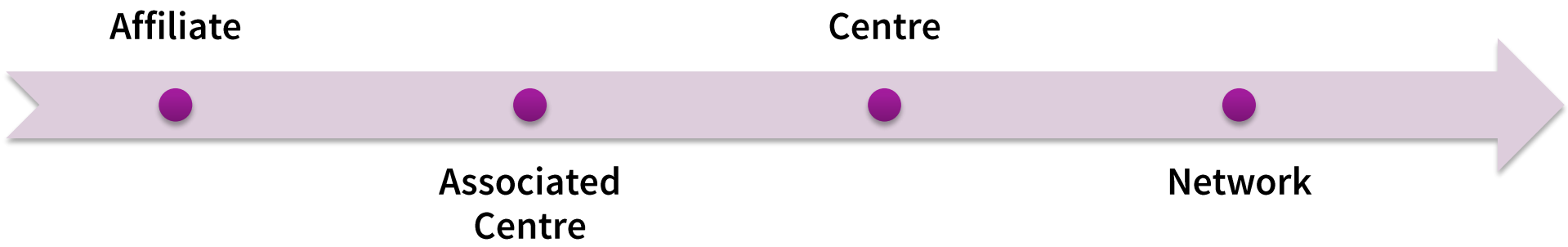
The potential impact of these changes on Centres is less pronounced, but may be significant if Geographic Boards are established. There is also the opportunity for change through permitting more flexible functions which would allow Centres to cooperate or consolidate with other Groups to create new hybrid Groups that respond to local needs: e.g. Centres may merge with Fields or Methods Groups or CRGs and become a larger Group with specialist focus.

Centres S&F proposals

The changes Centres and Branches are about to embark on as a result of their structure and function review are, in many cases, a consolidation of progress made over recent years in pushing the boundaries of what Centres do. This includes formalising the 'Network' concept piloted by the Iberoamerican Cochrane Centre; re-aligning functions to meet the *Strategy to 2020* needs; and to reflect the reality of what Centres are doing now.

Structural changes

Our current structure allows for Branches and Centres as the only formally acknowledged geographical Groups. Under the new system a broader range of Groups will be possible. This will allow flexibility to recognise small or specialised groups of collaborators in new 'Affiliates'; and to create Cochrane networks within countries and regions so that we can have wide reach and be inclusive. This will also allow us to offer a developmental journey where Groups are establishing a new presence in a country. The hierarchy of Groups available would be as illustrated below.



Functions

The adjusted list of functions of Centres and other geographically oriented Cochrane structures are all directly built on *Strategy to 2020* objectives. The functions are in a tiered hierarchy. Tier One functions must be performed by any Geographic Cochrane Group, however big or small. Tier Two functions must be performed by Associated Centres (formerly Branches) and Centres.

Tier Three are functions that Centres must perform as well as those in Tiers One and Two. Tier Four are additional functions that any Cochrane Group would be encouraged to consider, however, Centres must perform at least one Tier Four function. These functions are written as: **"It is a core function of Cochrane Centres [to…]"**

Accountability

We are replacing the previous model of accountability for Centres whereby certain 'Reference Centres' were responsible for large areas and Cochrane Branches or Centres developing in that area would have to work through their Reference Centre. This was a powerful model for the growth of Cochrane Groups over the last 20 years, but now we have reached a certain level of organisational maturity we believe that this needs to change. We are revisiting accountability for Groups on a case by case basis to ensure that the support and mentoring they need are set up with the most appropriate Centre. The cumbersome naming conventions linked to the old system, such as the Hungarian Branch of the German Cochrane Centre has been dropped.

We will situate Affiliates, Associated Centres, Centres and Networks in a clear accountability framework.

Fields

The Fields structure and function review was suspended as it became apparent that a Cochrane KT strategy was needed before the future role of Fields could be defined. The same challenge presents itself elsewhere as Centres and CRGs also undertake KT, but given its prominence in the work of Fields it is more of an issue for this Group type. We expect that the KT strategy will have a profound impact on all Groups, but particularly Fields.

The two most important challenges for Fields are sustainability (funding is problematic) and difficulty with integration between Fields and other Groups.

We think that in relation to the changes proposed in the rest of this paper the most productive approach would be to integrate Fields with other Groups, either Thematic Groups or Geographic Groups.

Some Fields could seek greater integration with CRGs by merging into Thematic Groups where appropriate, or becoming new review production/KT leads in certain areas (for instance, Child Health or Nutrition). Fields where their work is firmly rooted in a geographic area could be consolidated with the local Centre, becoming part of the country network. The Field would be a specialist workstream for a Centre/Country Network and would have some independent status as befits the size of the Field (i.e., either Affiliate or Associate). This may be beneficial as the role of Centres is closely linked to knowledge translation and communication, so in terms of nature of the work there would be a close fit.

Fields could take on the promotion – within the new membership model - of promoting networks of people in Cochrane interested in a particular cross-cutting element of research.

Methods Groups

In a situation where we have limited resources and challenges in terms of quality of reviews and integration of new methods, stronger methods support for the Cochrane Review production process is essential and should be our highest priority in this area.

We aspire to be at the cutting edge of methods research, and that in many cases may help us achieve our mission, but this is secondary to getting good methodological support in place for the production of our core product. Given that funding research is not an objective of Cochrane we must focus funding methods research in future on commissioning work that will generate improvements to our review production output.

We have a significant amount of funding that we use to encourage innovation in this area, but we do not actively manage the initiatives coming out of that. We also rely on the Methods Groups to drive forward the methodological work required for future review types (e.g., prognosis reviews) or methodological advances (e.g., risk of bias for non-randomised studies).

We recognise the expertise that the methods community brings and we want to harness that for mutual benefit, and so we do not want to undertake methodological work in a central capacity as it is more effectively undertaken in the community. However, we think that Cochrane needs to take more of an active role in this area, so that those developing new methodologies that have been identified as important to Cochrane's future are not just funded but are actively supported to ensure these methodologies are developed and implemented as efficiently as possible.

The Methods Groups structure and function review provided a series of key messages and proposals. These are presented below. These findings are helpful and align with most of the other ideas in this document. There is a clear need for methods to be at the centre of Cochrane's work and more central administration, coordination, oversight of this through a clear methods strategy would be welcomed.

Methods needs to operate within a clearer framework which allows for decisions to be made effectively through a new Cochrane Scientific Committee. We need to put more focus on developing the most important methods and not just funding them, but supporting them in the development and implementation phases.

Post implementation it is important that support continues, though this should be through a methods support service that provides a service to the Cochrane community to ensure there is adequate support to see methods implemented consistently.

Key messages and proposals from the Methods Structure and Function review

Brief statements of the review's key messages and proposal descriptions are below. The proposals, although distinct, are interdependent. Further work will connect these proposals if they, or an alternative proposal, are agreed in a strategy. We need to separate two distinct functions: research and development from methods implementation. We seek to strengthen methodological support by proposing a direct support service to CRGs, fund priority projects in open competition, and address leadership and decision-making within methods. In addition, engage more methodologists to support our activities and encourage a re-think around Methods Group structure with other group types in Cochrane.

1. Cochrane needs an integrated methods strategy specifically addressing decision-making and management of methodological developments and their implementation.

Proposal: Develop an integrated strategy for methods developments and priorities through an open competitive funding process.

2. Demands for higher quality and user relevant reviews need Cochrane to meet these responsibilities by providing some financial support with other rewards to ensure timely guidance to review authors and Cochrane Review Groups.

   Proposal: A funded support unit (s) to provide an advice service that addresses routine queries from editorial bases and review author teams and strengthens links between CRGs and MGs. The unit will support career development of methodologists. The unit will filter specialist queries to the correct experts by paid consultancy. Funding for networks of CRG based methodologists linked to network host Methods Groups is preferred by some convenors.

3. Cochrane needs to engage with the rapidly increasing methods innovation and development in evidence synthesis. To succeed Cochrane needs to preserve its large community of methods expertise, and invest in a robust recruitment plan to engage, encourage and reward these people.

   Proposal: A recruitment plan will identify ways to engage methods people to support Cochrane's continuing methodological needs. This plan will consider incentives and rewards, as well as several proposals to engage early career researchers into Cochrane.

4. Cochrane has played a key role in networking methodologists. Cochrane's large number of groups needs to be simpler to improve user engagement. Methods Groups need to consider how they can work more effectively together, and with Centres and CRGs to promote high quality, relevant reviews.

   Proposal: We suggest the methods community consider different suggestions that support clustering arrangements and promote closer working between Methods Groups. We do not want to impose change but will encourage *active* discussions. Methods expertise is not necessarily always within our Methods Group structure and therefore we should seek additional expertise elsewhere.

5. Cochrane needs leadership to enable fair, effective and transparent decision-making. Cochrane should address the balance between fostering expertise and methods leaders with the need to make prudent and informed decisions on methods. Leadership needs a multipronged approach that encompasses supporting methods leaders working in Cochrane, centralized decision-making and defining the roles of convenors.

   Proposal: We propose a scientific committee to guide and oversee the methods Cochrane should employ. We need to clarify current methods infrastructure and qualify roles and expectations of methods Groups convenors.

Next Steps

- Although the Steering Group has endorsed these proposals for change there is still a significant amount of work to be done before they can be implemented. The Central Executive Team will need to engage the community with these proposals to develop them further before formal consultation exercises begin.

- As an initial step the CET will convene a group of Group staff to work up the proposals in much greater detail, involving collaborators from a full cross-section of Cochrane Groups in such meetings.

- The costs of the organizational changes have yet to be determined – and will depend on the eventual nature, scale, timing and methods of implementation chosen.