



Cochrane

Governing Board Paper

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Agenda item:	Cochrane Content Strategy
Submitted for Governing Board meeting:	Lisbon, March 2018
Submitted by:	Chris Champion and David Tovey
Sponsored by:	David Tovey, Editor in Chief
Access:	Open
Decision or information:	Decision
Resolution for the minutes:	The Board approves the content strategy framework and associated level of funding to deliver the priorities for 2018-2020.
Executive summary:	<p>To be the leading organisation in health care decision making that we aspire to be it is essential that Cochrane's content keeps pace with the needs of decision-makers worldwide. We need to produce the right content, by addressing research questions that evidence users have identified as important, by employing the right methods and using the most appropriate sources of data. Furthermore, we need to ensure that the presentation and delivery of content is optimised, and indeed customised, around the needs of a broad range of end users, including those making health care decisions.</p> <p>In response to this challenge we have devised a strategy that involves surveillance and user research to ensure we are always aware of the user needs; a process of assessing and prioritising innovation; and a framework for managing the development and implementation of those innovations we wish to see implemented.</p> <p>We believe that this provides us with the mechanisms required to more efficiently and systematically identify and develop and implement content innovations that matter.</p> <p>We have identified targets for development and describe a budget that will be needed to deliver these.</p>
Consultation with Cochrane Council:	There has been initial consultation with the Cochrane Council, amongst other individuals and groups prior to the completion of this paper. Post-approval of the strategy we will consult further with the Council on the operational challenges associated with implementing this work.
Financial request:	The Board are asked to approve a level of umbrella funding for the content strategy. In 2018 additional funding of £70,000 and further spending of £200,000 per annum in 2019 and 2020.

Contents

1	Rationale and background	2
2	Vision and Mission	3
3	What we have heard from our stakeholders so far	4
4	Strategy decision-making process	5
5	Goals and Targets for 2018-2019	7
6	Aligning new initiatives with what is already in the pipeline	10
7	Budget for 2018 – 2020	11
8	Conclusions	12
9	Strategy review period	12

1 Rationale and background

1.1 Rationale for a Content Development Strategy

The world of evidence synthesis is constantly developing, just as the needs of decision makers are becoming more complex and sophisticated.

To maintain its dominant position as the world's largest producer of high quality systematic reviews that guide decision making, Cochrane needs to ensure that the reviews it produces utilise current best practice in research synthesis, and that they address the known priorities of decision makers. To achieve this, Cochrane needs to be able to evaluate methodological and other enhancements as they arise – and many originate with individuals and groups affiliated to Cochrane – and to make choices about which amongst these to assimilate into its reviews.

Our Content Development Strategy needs to be focussed on the needs of end users and decision makers and to address at least two distinct elements. Firstly, it is essential that Cochrane produces the right content, by addressing different research questions that evidence users have identified as important, by employing the right methods and using the most appropriate sources of data, including individual participant and diverse data. Secondly, and to address the needs of Goal 2 of our Strategy to 2020, we need to ensure that the presentation and delivery of content is optimised, and indeed customised, around the needs of a broad range of end users, including those making health care decisions.

The strategy builds on Cochrane's achievements to date, and represents a strengthening of our ecosystem: bringing together our people and communities, processes and quality assurance, and our technology developments.

The Content Development Strategy overlaps with other active programmes and workstreams, including the Knowledge Translation (KT) Strategy. It is essential that the overall direction is coherent and that these overlapping activities are aligned. The essential role of the end user provides an important element of this alignment.

1.2 Key considerations when considering content innovation

The key principles that we will need to employ include the following:

- Content decisions should be explicitly aligned with end user needs and explicitly geared towards achieving impact in health care decision making. Our community is well placed to facilitate the identification and evaluation of ideas, and is also itself a major source of intelligence and innovation. However, external engagement is also critical.
- The Development Strategy should be evidence based where possible, and the need for quality of our processes and outputs is crucial: each Cochrane Review carries our brand: therefore all reviews and related content must be of the highest quality judged by empirical evaluation and current best research practice
- Our strategy needs to encompass consideration of choices: Cochrane needs to identify processes that support active decision making and optimal use of our most precious resource – our community
- Our strategy needs to pull together implementation challenges across at least these domains:
 - People and communities: How do we develop a critical mass of people with the relevant expertise? How do we scale up as appropriate? How do we ensure that we provide professional development opportunities for our people?
 - Processes and quality assurance: how do we ensure consistency of quality and editorial process and outputs?
 - Platforms: how do we facilitate the efficient production of the evidence and its publication in the Cochrane Library and elsewhere to optimise impact and usage by end user groups?
 - Efficiency and value for money: how do we ensure that resources are utilised most effectively

1.3 Diverse data

Julian Elliott has been leading on an associated area of work around Diverse Data This has been incorporated within the context of the content strategy, as we felt it was inappropriate to consider such content innovations outside this current framework. Three groups were commissioned to work up papers on (1) the expansion of IPD analysis in Cochrane, (2) the use of diverse data in prognosis reviews and (3) the use of large observational datasets particularly for assessing harms. These papers are available [here](#).

This is very much work in progress, but we acknowledge the importance of these challenging areas of work and believe that the plans we are working on in this area are stepping stones towards introducing new ‘big’ data sources in Cochrane’s work in a manageable and appropriate way.

We are grateful to Julian and the members of the Cochrane community who have helped so far in these areas, and we will continue to move this work forward within the content strategy framework.

2 Vision and Mission

Cochrane's Vision, as set out in our *Strategy to 2020*, **is a world of improved health where decisions about health and health care are informed by high-quality, relevant and up-to-date synthesized research evidence.**

Cochrane achieves its Vision through its Mission to **promote evidence-informed health decision-making by producing high-quality, relevant, accessible systematic reviews and other synthesized research evidence.**

The Content Strategy has a key role in ensuring that the evidence produced by Cochrane allows us to achieve this vision and mission. In particular, the strategy addresses the need for Cochrane evidence to demonstrate:

- High quality (Goal 1, Strategy to 2020)
- Relevance to stakeholders (Goal 1, Strategy to 2020)
- Broad coverage (Goal 1, Strategy to 2020)
- Pioneering methods (Goal 1, Strategy to 2020)
- Efficient production (Goal 1, Strategy to 2020)
- Useful, actionable and accessible evidence (Goal 2, Strategy to 2020)

3 What we have heard from our stakeholders so far

In the period following the Global Evidence Summit we have not had the opportunity to undertake a formal or comprehensive consultation with stakeholder groups. However, we have actively sought the opinions and perspectives of a broad group of decision makers internationally, including funders in Australia, Canada and the UK, WHO, Service commissioners and others.

However, we recognise that the consultation that has been possible to date is limited. We need to build on previous user research to explore further the extent to which end users' decision needs are currently addressed and in particular the gaps, and also their predictions on future needs, however speculative. The current user research being conducted by Wiley may address some of this need.

In the future, Cochrane needs to institute ongoing, systematic and continuous surveillance in order to identify emerging trends and methodologies.

Our discussions to date have identified some current global themes:

- Consistent interest in evidence around health systems, the implementation of effective interventions and health service delivery
- Continuing emphasis on comparative effectiveness research
- The importance of evidence that addresses the health needs of disadvantaged and high risk populations
- A need for evidence to be produced more rapidly and updated in 'real time'
- A need for evidence to be useful and actionable
- A growing interest in personalised evidence or 'precision medicine'

Whilst we acknowledge that there is still a lot to do to refine our processes for the content strategy and to understand more about the needs of evidence users, we consider that we have sufficient understanding to make some initial recommendations for action. This is based on a consensus amongst the relevant

stakeholders we have spoken with on the immediate priorities, allied to a strong message that urgent action is required.

4 Strategy decision-making process

The fundamental framework of the content strategy is a decision-making process that starts with the user. We want to have an ongoing process for identifying and assessing the needs of decision-makers in such a way that we can assess our content offering for relevance.

Cochrane cannot and should not try to respond to all end-user evidence needs – certain content types will be outside of our area of expertise for good reason, so an initial question will always be how appropriate is the new content type for development within Cochrane? For content innovations that are judged to be appropriate it is important that Cochrane develops a staged process to identify and evaluate them leading to a formal approval process. This should incorporate consideration of the quality and maturity of the changes proposed, their utility to evidence users, and the feasibility and challenges of implementation, including the need for resources and other support.

Our strategy process is a living one, that allows us to identify new content innovations at any time and to take prioritisation decisions periodically on what should be implemented next rather than attempting to set out an inflexible roadmap for changes.

The strategy process is a five-step process.



4.1 Surveillance

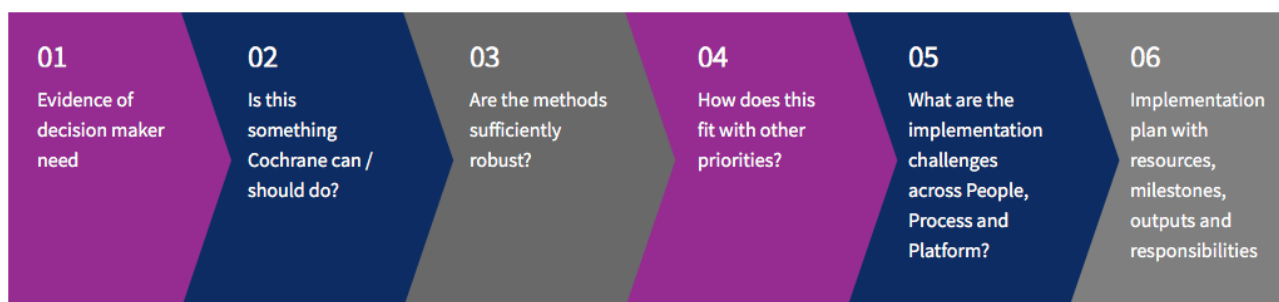
We will undertake regular user research to identify developments in the needs of our users. We envisage running user research exercises at least every two years with a focus on content.

In addition, we will work with Methods Groups and other Cochrane communities to identify new areas of research that may have an impact of Cochrane's content.

4.2 Assessment

All identified content innovations will need to be assessed for us to understand the relevance of the innovation and to understand what it will take to act on this development.

Below we describe a potential ‘decision tree’ process, that incorporates the complementary roles of the Scientific Committee (step 3) and Editorial Board (steps 4 & 5):



In step five the key considerations are:

- People: how can we scale up capacity
- Process: how can we ensure consistency
- Platform: how can we produce and publish the content

4.3 Classification

Once new content innovations have been identified and considered by the above assessment process they will then be assigned a category that contextualises them in a development pipeline. The purpose of this is not to state priorities – that is covered in the annual planning – instead it provides us with a proposed pipeline of innovations, which allows us to focus not only on the immediate priorities for implementation, but also to think about what might be next for implementation and ensure that it is progressing adequately.

Implementation

These are areas of work that we believe are ready to be implemented in the Cochrane Community (e.g. the methods are sufficiently developed and agreed) and so we will be putting resources into facilitating implementation in the short term. These ideas will have been assessed by the above process for relevance and will have been prioritised against other areas that are also ready for implementation.

Coordination (pre-implementation)

These are areas where a lot of work is already happening (e.g. in Methods Groups) and we know from the processes above that they are relevant to our users, however, for the most part these innovations will still be some way from being ready for implementation due to factors such as methods not being fully established or agreed. Our focus for these areas will be to support those working in these areas to complete the required pre-implementation work, so that when we have capacity to take on further areas for implementation the ground work is done and we are able to move the item to the ‘implementation’ category.

Watching brief

These are areas where we know there is interest and work ongoing, and we wish to let that continue. These are not necessarily low priority areas, but it may be that it simply isn’t the appropriate time to take on these challenges, or we may need to work with partners who are not yet in place. Items in the ‘watching brief’ category will be routinely reassessed to see whether they

should move upwards to ‘co-ordination’ and ‘implementation’ or be re-categorised as follows partnership dependent or rejected.

Partnership dependent

In the case of some changes or review types, we do not think Cochrane can, or should, seek to duplicate efforts already occurring elsewhere. However, it may be appropriate for Cochrane to partner with groups who are already engaged in the relevant areas and have developed a high degree of expertise.

Rejected

It is appropriate that as part of our responsibility to make choices, we accept that some changes or review types are inappropriate for Cochrane in the foreseeable future. As the process is just starting we do not have anything currently categorised as rejected, but over time we would expect certain areas of work to be considered and subsequently rejected.

4.4 Prioritisation

Each year, or as required, we will assess the content innovations within our pipeline to set targets for development work. In the first instance, we are setting out some initial targets for the next two years, but it is important to understand that as further user research takes place we may need to refine these targets. This prioritisation can be re-run whenever relevant and should use the knowledge from the surveillance in combination with factors such as what capacity is available and how much work a particular innovation requires.

4.5 Action

The final step in the process is to act. This action may be in the coordination phase above or the implementation phase. The actions we are currently committing to in the short term are laid out in the next two sections.

5 Goals and Targets for 2018-2019

We will only set targets in areas where there is active work planned and where we think it is important to track progress to be able to demonstrate success

Goal 1: Ask the right questions

We aim to:

- Ensure that within each Network there are processes in place to ensure that all accepted titles explicitly address uncertainties that are important to decision makers or evidence users.
- Increase the number of prioritised titles that are identified through formal processes, such as
 - Active engagement with external stakeholders, including processes such as those used by the James Lind Alliance
 - Direct commissions from guidelines groups, national or international agencies

- Use of data e.g. health impact, prevalence, clinical variation etc
- Identify different review types that address the uncertainties identified by evidence users and create pathways to implementation among relevant Networks and CRGs

Targets for 2018-19

1. All networks to incorporate prioritisation plans into their strategic development plan. This target is covered by agreed funding for the CRG Transformation Programme (Implementation).
2. Develop and deliver an implementation plan for the introduction of prognosis reviews within the Cancer Network. This target is covered by agreed funding from the Strategic Methods Fund. (Implementation)

Goal 2: Use the right data

We aim to:

- Provide specific guidance on when and how to incorporate individual participant data and other forms of data, including Clinical Study Reports and aggregate data held on publicly available registries and databases
- Increase the number of reviews that incorporate additional forms of data and study types beyond published reports of RCTs in scientific journals, where this is appropriate and valuable to the end users

Targets for 2018-19

3. Prepare and submit a report to the Scientific Committee and Editorial Board describing workable proposals to expand the data sources within Cochrane to include individual participant data, Clinical Study Reports and large administrative datasets. (Co-ordination)

Goal 3: Use the right methods

We aim to:

- Ensure that there are surveillance systems and selection processes in place to identify and evaluate emerging methods and other developments aimed at improving the utility of the Cochrane Library.
- Exploring and if appropriate implementing guidance and systems for producing ‘rapid reviews’
- Ensure that there are processes that include the development of an implementation plan, to ensure efficient and quality focussed introduction of methods changes and other developments. This may include attention to the following challenges:
 - Developing capacity
 - Training and learning

- Developing guidance
- Technology and platform enhancements

Targets for 2018-19

4. Develop and execute implementation plan for scaling up the use of network meta-analyses by at least 3 CRG Networks, starting with the development of standards for Cochrane NMA's (Implementation)
5. Develop proposals to include equity considerations prospectively in all relevant new and updated Cochrane Reviews (Co-ordination)
6. Develop an agreed definition of a 'Rapid Review' and proposals to assess which methods, if any, can be truncated to achieve publication within 3 months, and the circumstances when this might be acceptable for Cochrane groups (if any) (Co-ordination)

Goal 4: Achieve impact and use

We aim to:

- Improve the presentation and delivery of our reviews to increase usage and impact, and to create other non-review content that provides additional value to end users, by
 - Developing content that is customised around differing user needs e.g. Plain Language Summaries for consumers and the public, summaries for policy makers
 - Developing content that 'breaks the data out of the reviews' to address specific user questions e.g. Linked Data and PICO annotation implementation
 - Seeking out different and novel delivery models (e.g. social media, tablet, patient decision aids, electronic patient records etc)
- Improve the value of our content by improving the efficiency of production, and speed to publication of high priority reviews, via
 - Responding to the challenge of the emerging 'living systematic reviews'
 - Exploring and implementing review automation processes where they have been shown to be safe and effective

Targets for 2018-19

7. Evaluate the ongoing pilot project and develop an implementation plan for Living Systematic Reviews that addresses the key challenges identified. This target is covered by agreed funding for Project Transform (Co-ordination)
8. Evaluate the use of the RCT classifier and if approved introduce proposals to ensure that its use is maximised within Cochrane. This target is covered by agreed funding for Project Transform

(Implementation)

6 Aligning new initiatives with what is already in the pipeline

There are many initiatives currently in various stages of delivery that are relevant to our content strategy. In planning work programmes for the next 1-2 years, we need to ensure that the proposals included in this document are viewed in the context of this larger picture.

Strategic Methods Fund

- Methods and Support for supporting Cochrane Prognosis Reviews Relevant to Goal 1
- Improving Narrative synthesis Relevant to Goal 1

Knowledge Translation Framework

- Work Packages Relevant to Goals 1 and 4

KT Work packages relevant to Content Strategy				
Work Package	Title	Priority?	Goal	Status
1	Embed Prioritisation	Yes	1	Design & implementation
3	Adapt review formats		4	Dependency
4	Improve and scale up products	Yes	4	Co-ordination
5	Translate	Yes	4	Co-ordination
6	Improve Cochrane Library		4	Dependency

- Living Systematic Review Programme Relevant to Goals 3 and 4
- PICO Annotation project Relevant to Goal 4
- Plain language summary guidance and customised presentation of reviews for policy makers project Relevant to Goal 4

New Cochrane Library platform

- Implementation of Updating Classification system Relevant to Goal 4
- Development of CENTRAL Relevant to Goal 4

- Methods Supplement to CDSR

Relevant to Goal 4

Fast track pilot

Relevant to Goals 3 and 4

User experience study (Wiley)

Relevant to Goals 1 - 4

Project Transform

- Introduction of RCT Classifier

Relevant to Goal 3

For simplicity, these are not included in the targets within this document or the budget request, except whether there are not previously agreed timelines and outputs or agreed budgets. However, it is important to see the proposed programme and budgets in the context of the active workstreams.

7 Budget for 2018 – 2020

There are many areas of this strategy that require investment, whether that is in research, capacity development, editorial or technology. Most any investment will be spent outside of the Editorial and Methods Department (EMD, formerly CEU) by commissioning work or consultancy services from Methods Groups or funding work in Networks or the wider Cochrane community. Some funding to accelerate technology development may be required, and in addition, there may be a need to support the development of further interactive learning modules.

In line with the approach taken with the KT Framework we propose an overall budget for content strategy development work, which will be managed by the Editor in Chief. We propose that this budget is initially set at **GBP 200,000 per annum until 2020**. However, given that we are already in the second quarter of 2018 we anticipate that spending will not reach that level this year, and in addition the existing budget includes £30,000 for content development, so the likely profile of additional spending would be **GBP 70,000** in 2018 and **GBP 200,000** per annum in 2019 & 2020.

At this level of funding we expect to be able to deliver all the targets by the end of 2020 and we would expect the deliver further targets which will be identified in 2018 and 2019 through the strategy process.

The available budget will be used to fund a range of activities to achieve these targets, e.g.:

- methods development work
- new standards and guidance development
- technology (where essential and outside of current roadmap)
- learning activities
- exemplar development
- user research
- programme management.

This list isn't exhaustive, but it is intended to illustrate the range of areas where money will be spent. Also, please note that many areas of the strategy are connected to areas of ongoing work that are already funded, so any funding allocated here is additional funding.

Where significant amounts of money are to be spent we will issue calls for proposals for transparency.

The level of investment will have a direct impact on how much development activity takes place and can be altered accordingly. If the Board wish to spend more or less than GBP 200,000 per annum we will alter our implementation plans accordingly.

The content strategy is a living strategy, so whilst we are referring to funding for 2018, 2019 & 2020 we do anticipate future recurring expenses in this area post 2020 if we are to continue to adapt to the constantly changing needs of evidence users.

8 Conclusions

We believe that this strategy document provides us with a robust framework for considering content innovations and seeing appropriate innovations through to implementation. We have also produced some initial concrete recommendations based on the process described and so we have set our priorities for the next 24 months. Further user research to understand decision-maker needs will be essential, and so our priorities may be updated as we learn more, but as a central executive team we feel that this provides us with the direction we need to make some real progress in content development.

9 Strategy review period

We would expect to update the strategy every two years after each market research exercise to consider the findings and re-prioritise the innovations coming through our pipeline accordingly. In this respect, the document will be a living process rather than a static document attempting to document the work we will undertake over the next 10 years. We may undertake interim reviews of the priorities where we feel we have capacity to take on additional work or where we know that certain advances mean that we should re-assess our decisions.