

Project Publish Updating Classification System (UCS): reflection and recommendations

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Executive summary

About 40% of all Cochrane Reviews published with a new citation are updates (285/645 in 2018; 242/574 in 2019). Cochrane has a policy that Cochrane Reviews should be updated based on need.

The [Updating Classification System](#) (UCS) was developed to help editorial and author teams assess and report on the updating status of an individual Cochrane Review. The UCS guides readers as to whether a Cochrane Review is up to date, likely to be updated in future, or does not need updating at the current time. The functionality to assign a UCS to a Cochrane Review was added to Archie in 2016, and the ability to publish the UCS data was available in late 2018. At this point, the Cochrane Editorial Unit (now Editorial & Methods Department) decided to review the UCS progress to date and also the available UCS data from CRGs, and invited key stakeholders to participate in a meeting in December 2018. The main output of the meeting was a decision that the publication of UCS data should proceed. The Project Publish UCS was set up and started in January 2019 to enable this. The project was due to last 12 months and had the following goal: all Cochrane Review Groups to have started publishing the 'update status' for published Cochrane Reviews (intervention and DTA) by the end of 2019.

During 2019, the Project Team worked closely with Managing Editors from four Cochrane Review Groups (CRGs) to pilot the publication before rolling it out to all CRGs during the course of the year. After agreeing a pre-publication checklist (to review and check the UCS data set before publication, and to have CRG and EMD sign-off), the UCS data for the Infectious Diseases Group started in May 2019.

Soon after publication started, a number of problems with the UCS data publication were identified in the Cochrane Library. Further UCS publication was paused while those bugs were addressed. One of the problems was that the publication of the UCS data removed the standard publication status information or metadata for that review; this includes the withdrawn status, new search label, conclusions changed label. While the other publishing issues were resolved, the cause of the publication status information was found to be due to the way the publication of the UCS data had been set up (i.e. during the publication and production process when content leaves Cochrane and is published in the Cochrane Library). Unfortunately, the publication team found that this could not be fixed. To enable publication as originally envisaged, an alternate approach would need to be created, and this major redevelopment was out of scope for this project.

The publication issue was a significant setback, and although the project was already behind schedule, it led to the project pausing in early November 2019. This was disappointing to everyone who had been involved in the UCS project. Despite this, the Project Team and the four CRGs gained further experience and insight into using the UCS and the publication of the UCS data. After a project review, to learn from these insights, the Project Team has two recommendations for taking forward future work related to the UCS or to other approaches for assessing and reporting the updating status of an individual Cochrane Review; and one for communications for this project:

- 1. Do not continue the UCS work 'as is' and focus efforts on integrating the UCS information (i.e. update status, rationale, explanation) into established editorial and publishing approaches.** *Within this, to explore and consult with users on how to rationalize the number of locations where readers need to look to find relevant information about the 'status' of a review, such as publishing/What's New events or update status information; and how to rationalize how 'status' information (metadata) is added to a review to reduce the number of locations to add this information.*
- 2. Integrate this work into an EMD Programme for Updating Systematic Reviews.** *There are several projects focused on or linked to updating systematic reviews; and bringing them together in a programme will help ensure that the work (research and development) is not done in isolation to other initiatives and ideas around updating or linked areas (e.g. prioritization).*
- 3. Take actions to communicate and manage the impact of the above recommendations.** *The CRG community has had an expectation that the UCS will be rolled out, especially with the 'Project Publish UCS' in 2019. A careful approach is needed to communicate the project findings.*

Cochrane updating policy and practice

About 40% of all Cochrane Reviews published with a new citation are updates (285/645 in 2018; 242/574 in 2019).

The policy for updating Cochrane Reviews is that Cochrane Reviews should be updated based on need. Aspects to consider are the currency of the question, the impact and usage of the current version, the availability of additional studies (or additional data for studies already included), and an assessment of the likely change of any newly identified studies or additional data on the current review version; in addition to methodological enhancements that may be required. (Source: <https://documentation.cochrane.org/display/EPPR/Policy%3A+Cochrane+Review+updates>)

Updating Classification System (UCS)

As described in the Cochrane Editorial and Publishing Policy Resource, the [Updating Classification System](#) (UCS) is there to help editorial and author teams assess and report on the updating status of an individual Cochrane Review. The UCS guides readers as to whether a Cochrane Review is up to date, likely to be updated in future, or does not need updating at the current time. The system can also help Cochrane Review Groups (CRGs) with prioritisation decisions for individual Cochrane Reviews. The UCS follows a decision framework (Appendix 1, pg 10) that asks about the usage and currency of the review question, the availability of new studies or information, and how new information would impact on the review; and also, whether new methods will make important changes to the review. The decision framework was proposed in a 2016 BMJ article on updating systematic reviews (Garner 2016; <https://doi.org/10.1136/bmj.i3507>) that followed a Cochrane-sponsored workshop on updating systematic reviews. The framework was adapted for Cochrane Reviews (not protocols), specifically those of interventions and diagnostic test accuracy.

Project to publish the UCS

In 2012, the Cochrane Editorial Unit (now known as the Cochrane Editorial & Methods Department), let the Strategic Session at the mid-year governance meeting. The title was 'The Cochrane Library: revolution or evolution? Shaping the future of Cochrane content', and one of the six themes was updating of Cochrane Reviews. One of the recommendations was to: "*Classify Cochrane Reviews of interventions using the classification framework, at least every two years. The framework, to be published on the Cochrane Database of Systematic Reviews, highlights to readers whether a Cochrane Review addresses a historical or current question, and also indicates whether the Cochrane Review is considered up to date, has an update is pending, or is not intended to be updated.*" The working party for this theme reviewed and engaged with prior work and tools in this area; see details in the full report from the Strategic Session. Also see the timeline of the development of the UCS after the Strategic Session in Appendix 2 (pg 11).

The recommendation from the Strategic Session was approved, and Cochrane committed to introduce the UCS information for individual Cochrane Reviews. In 2016, basic functionality was added to Archie to permit CRGs to do this for reviews of interventions and diagnostic test accuracy (DTA). The intention was for the basic functionality to be improved over time in response to user feedback. The intention was also for the UCS to start to publish in the Cochrane Library (alongside the Cochrane Reviews) as soon as possible, but in 2017, when publication would have started, the Cochrane Library started a major transition from the Wiley publishing platform to a third-party platform; this meant that publication of the UCS could not start on the old platform and had to wait. The new platform was launched in August 2018 with the functionality to publish the UCS information included. Over this time, training events to learn about the UCS took place, a guide to using the UCS has been available for CRGs, and Managing Editors have been encouraging each other to do this at various meetings by presenting and sharing the many projects we had done using their own initiative. To date, about 26 CRGs have classified over 50% of the reviews in their portfolios; see Appendix 9 (pg 29).

In December 2018, the EMD convened a meeting of key stakeholders to review the UCS to date and decide whether to proceed with publishing the UCS. The decision was made to progress towards publication, and a project ('Project Publish UCS') was set up in early 2019. The goal was for all Cochrane Review Groups to have started publishing the 'update status' for published Cochrane Reviews (intervention and DTA) by the end of 2019. (Note: the minimum was the classification of reviews published in 2018 and 2019.) The project form is available in Appendix 3, pg 14.

Ending the project early

In November 2019, the project was paused because the project was not able to complete objectives as set out. A number of bugs were noticed soon after publication started (Appendix 4, pg 17), so further UCS publication was paused while those bugs were addressed. One of the publication issues – in which publishing the UCS prevents the publication of standard publication status information (e.g. tags for new search or conclusions changed) – was found not to be a bug but instead an issue with the way the publication of the UCS data had been set up. The publishing system for UCS relied on the publication status not being changed at the point at which the Update Status was applied (because the statuses are independent), but we discovered that publication status (including the status of 'withdrawn') was always removed rather than left unchanged. The publication team found that this could not be fixed, as it was due to the fundamental design of the publishing system. To enable publication as originally envisaged, an alternate approach would need to be created, and this major redevelopment was out of scope for this project.

By this time, the project was also significantly behind the anticipated schedule (due to be a 12-month project), and most objectives had not been met; see Appendix 5 (pg 14) for a summary.

Blockers to rolling out the UCS

Although the publication issue was a key factor in deciding to pause the UCS project, other work conducted during 2019 – and particularly through working closely with four CRGs to prepare their UCS data sets for publication – has highlighted that there are other potential blockers to a successful rollout of the UCS and to meeting the project goal as set out.

- **Publishing system:** the proposed system to publish the UCS from Archie was flawed and could not function correctly, so an alternate system would need to be created.
- **UCS decision-making flowchart** (see Appendix 1, pg 10): resource-intensive and not applied in a common way; i.e. using methods (e.g. to get a statement of fact) or using editorial knowledge (e.g. editorial judgement).
- **High workload for CRGs:** both applying in first instance and maintaining/keeping up to date (especially with no tools to support this).
- **Published view:** potentially adds rather than reduces complexity
- **Editorial management system functionality:** basic functionality; and separate to location where What's New events added (RevMan).

Reflections on the project

As part of the review of the project, the Project Team met with the Managing Editors from the four volunteer CRGs and ran a retrospective session to gather feedback from the project to date. Also, the Project Team met separately to do the same, feedback was also invited from the ITS Manager, and an initial discussion held with an external user experience (UX) specialist about the display in the Cochrane Library. The feedback was across the following themes:

- Archie
- Communication
- CRG development
- CRG engagement

- CRG workload
- EMD Support
- External user engagement
- UCS decision-making flowchart
- Teamwork
- Project management
- Publication

The feedback was grouped into ‘what went well’ and ‘what didn’t go well’ (Appendix 6, pg 21) and then converted into ‘what to keep doing’ and ‘what to do differently’ (Appendix 7, pg 24) to help guide the next steps of this work.

Although the recommendations don’t cover specifically project management or publication, there are several learning points that should be reviewed and incorporated into future work.

For project management, these include: the benefits of formally setting up the project; having the support of a group of CRGs/MEs to work with before the full roll out, and building on their enthusiasm to help tease out problems on behalf of their CRG editorial colleagues; not underestimating project workload; and ensuring the project has a specific budget.

For publication, the UCS publishing functionality was set up many months in advance of its release (switch-on), and before the current Cochrane Library Product Manager was in place (with oversight of the Cochrane Library roadmap). The team has confidence that this same issue would not be repeated, and two of the learning points is to retest Cochrane Library features (developed some time ago) before release; and to follow new processes in place for Cochrane Library developments to develop any new UCS-related features (to avoid the issue with the feature not working as expected upon publication).

Recommendations: summary

Going forward, and learning from the project reflections, the Project Team recommends the following:

No.	Recommendation
1	Do not continue the UCS work ‘as is’ and focus efforts on integrating the UCS information (i.e. update status, rationale, explanation) into established editorial and publishing approaches.
2	Integrate this work into an EMD Programme for Updating Systematic Reviews.
3	Take actions to communicate and manage the impact of the above recommendations.

Recommendations: further detail

Recommendation 1. Do not continue the UCS work ‘as is’ and focus efforts on integrating the UCS information (i.e. update status, rationale, explanation) into established editorial and publishing approaches

What we have learned

The UCS was intended to be **separate to the standard publishing information/activity** around a systematic review (e.g. provide a commentary on the update status of a review).

In practice, it turns out that it is **not ideal to separate these** because for *readers*, there is information about the ‘status’ of a review in multiple locations, which is potentially confusing, and for *CRG editorial and author teams*, there are multiple locations to add in this information (see examples in Appendix 8, pg 27).

Also, in practice, the **UCS did not account for overlap with the established ‘What’s New’ events**. For example, the ‘no longer updated’ What’s New event is intended to be used for the same circumstances as set out for the UCS ‘no update planned’ explanations plus other ‘up to date’ events ((10) ‘Certainty (quality) of evidence high in published review’ and (11) ‘New information identified but unlikely to change review findings’).

Formal **user testing** – before rollout – of the UCS decision-making flowchart, the editorial interface, and the publishing interface would likely have helped identify some of the issues that have been barriers to the successful implementation of the UCS. Users may be editors, authors, or users of the Cochrane Library depending on the aspect being tested; for example, Cochrane Library users would test the publishing interface. For background information about user testing, see “[Why You Need User Testing \(And How to Convince Others to Feel the Same\)](#)” by J Weber (published 24 May 2018, accessed 10 March 2020).

What to explore

For readers: How to rationalize the number of locations where readers need to look to find relevant information about the ‘status’ of a review. The status information may be publishing events or update status information. For user testing, we propose engaging users of the Cochrane Library to take part in formal user testing to provide feedback on the current interface and to provide feedback on any proposed changes to the interface, to help ensure that the information is understandable and accessible.

For editorial teams: How to rationalize how ‘status’ information (metadata) is added to a review. This may be by combining publication events and updating status, and by taking advantage of a new EMS to capture this information in a more efficient way (e.g. by integrating into workflows) and potentially to share select information with readers (e.g. via an API from the EMS to the Cochrane Library to share info such as an update is undergoing peer review). There may be opportunities to combine or use the versioning approach that has been proposed for Cochrane Reviews (see Recommendation 3). Also, one of the known limitations of the UCS was that this information would be available on the Cochrane Library (Wiley) platform only, and not available via third-party data feeds (e.g. PubMed). By integrating in established publishing processes, it may be possible to make this information available via these approaches. The ability to translate the published updating status information will also need to be included from the outset of future developments. For user testing, we would want to ensure that any changes made meet the needs of the editorial teams that will use it, and therefore to engage with the editorial teams and to conduct user testing as needed to inform changes.

UCS decision-making flowchart: As part of this, we will need to consider whether to keep the UCS flowchart as is, or to see if there are alternative ways to capture and share the same UCS information (e.g. update status, rationale, explanation) but in a different way that reduces workload for CRGs and avoids duplication with the publication events or publishing processes. We identified, for instance, that there is overlap in the UCS flowchart guidance for ‘no longer updated’ and the Handbook (previous version) for reviews that are ‘no longer updated’ (stable); our recommendation is to combine these and use the What’s New event to combine this information; see details in Appendix 10 (pg 31).

User testing: Looking forward, user testing needs to be integrated into future developments both as a standard step and with associated budget: releasing a method, publishing change, or new editorial workflow will likely have a higher chance of success if there has been full user testing with changes made in response as needed. This means engaging with the relevant user group (will depend on what is being tested) to inform developments. As an example, Cochrane Library users would provide feedback on how Cochrane displays information about the ‘status’ of a review, and on any proposed changes to the interface, to help ensure that the information is understandable and accessible. Also, to engage with CRG editorial teams on the design of the UCS decision-making flowchart to learn, for example, if users are able to apply in a consistent way (and how to modify to facilitate this), how long it takes to complete (and if it could be modified to improve this for editorial teams), and how this integrates into the editorial

team's 'business-as-usual' tasks (to see if this works well or could be improved). Being able to tell stakeholders that this has occurred will also help increase confidence in introducing something new.

Recommendation 2. Integrate this work into an EMD Programme for Updating Systematic Reviews

Updates account for about 40% of all reviews published each year (of new citation versions). Setting up an EMD Programme for Updating Systematic Reviews will help ensure that the work (research and development) is not done in isolation to other initiatives and ideas around updating or linked areas (e.g. prioritization). The EMD has several projects focused on or linked to updating:

- **Publish UCS**
- **Update protocol:** to enable authors to publish a protocol for an update of a Cochrane Review in which the protocol is part of the same CD number sequence.
- **Versioning:** whereby each version of a Cochrane Review gets a new DOI but linked versions are collated together (with combined metrics) within a single edition
- **Authorship for updates**
- **Living systematic reviews**
- **Prioritization:** not previously grouped with updating projects, but listed here as the CRGs reported that the UCS had been helpful with prioritization activities.

Recommendation 3. Take actions to communicate and manage the impact of the above recommendations

Communications

The CRG community has had an expectation that the UCS information would be published alongside Cochrane Reviews in the Cochrane Library. We know that many CRGs have taken time and resource to apply the UCS to their portfolio of reviews, and have continued to do so in 2019; see Appendix 9 (pg 29). Also, the LSR team was planning on using this to communicate changes to the LSRs between citation versions. Therefore, any communications about the next steps need to be planned and shared carefully and thoughtfully.

The following key messages have been identified so far:

- Include an overview of the project, what has happened, and the recommendations from the project review.
- The communication about this project must not make light of work the CRGs have done, must say sorry, and must say what will happen next.
- Recognize that uncertainty about the future of UCS is impactful for CRGs. Many CRGs have invested resource in the UCS and the communication about pausing the UCS could result in confusion and/or wasted resources for editorial processes.
- Highlight the positive feedback that the UCS has been useful for prioritization activities.
- Acknowledge the impact on existing editorial policies and procedures (see below).
- Acknowledge the impact on UCS functionality in Archie (see below). As part of this, let CRGs know that they can continue to use this functionality (e.g. to assist with prioritization activities), but there will not be any publication of the data in the near future.

Also, the following points about how and who to share the communications with were raised in the retrospective meetings:

- Important to share a communication with CRGs as early as possible, as the team said would happen in the early December update (which noted the project was now on hold). This will help CRGs consider if, how, or what to do with any ongoing UCS work within their CRG.
- Ensure relevant people within the CET and Wiley are looped into communications about this project.

- Prepare ME Support for questions.

Impact on existing editorial policies and procedures

The UCS is mentioned in some policies and guidance in the Editorial and Publishing Policy Resource (EPPR); see Table 1.

Table 1. Mentions of the UCS in EPPR policy or guidance: proposed actions

Section	Text	Proposed action
Policy: Cochrane Review updates	“Refer to the Updating Classification System to help assess and report on the updating status of an individual Cochrane Review.”	Remove this line.
Policy for use of editorial workflows by Cochrane Review Groups	“Review Update workflows are not needed if the Review has the Update status ‘No update planned’ as assessed by the Updating Classification System .”	Remove this line.
Withdrawing published Cochrane Reviews	“Cochrane Reviews should only be withdrawn under exceptional circumstances (i.e. for reasons other than those that can be described using the Updating Classification System), for example, if there is a concern about the conduct or reporting of the Cochrane Review:”	Remove the text in brackets “(i.e. the reasons...)”.
Subsection in the ‘Cochrane Review Updates’ specifically for the UCS	—	Move to ‘Archive’ (keep files available).
What’s New events: no longer updated (stable)	Current page doesn’t include guidance for ‘no longer updated’, and this needs to be included as still being used for about 100 reviews per year. The 2008 Handbook guidance overlaps with the UCS guidance (as set out in Appendix 10, pg 31). The Project Team recommends updating the guidance to incorporate elements of the UCS <i>and</i> putting on the CLIB backlog a ticket to make this publication status visible in the Cochrane Library (as used be the case on the old platform).	Add guidance for ‘no longer updated’ that incorporates elements of the UCS (as per Appendix 10, pg 32). Add ticket to make this status visible in the Cochrane Library.

Impact on UCS functionality in Archie

The UCS is applied to individual Cochrane Reviews in Archie on the ‘Updating’ tab. The EMD needs to reassure CRGs that this tab will not be removed and that CRGs can continue to use it as needed for internal purposes only.

Impact on the UCS guidance document

Also, the UCS guidance document (<https://documentation.cochrane.org/display/EPPR/Guide+to+applying+to+Cochrane+Reviews>) should remain available should CRGs wish to consult this, and there should be a named person or team in the EMD who can respond to queries.

Living Systematic Reviews guidance

The guidance document for LSRs had included several references to the UCS. These were removed before the current version (v1.0) went live in December 2019. No further action needed.

HappyFox space for UCS queries

The Project Team set up an email address and corresponding HappyFox space to manage UCS-related queries. This email and HappyFox space should be closed down.

Remove published UCS data

The UCS for the Cochrane Infectious Diseases Group is published and available to view in the Cochrane Library. This will be removed from view (hidden) and the functionality to publish further UCS switched off in Archie.

Summary

While the Project Publish UCS was not successful in meeting its goal, there have been several important learning points, and the Project Team has set out two recommendations to help guide future developments for publishing updates of systematic reviews and one recommendation to inform communications.

Acknowledgements

The Project Team would like to thank the Managing Editors of the four CRGs who volunteered to pilot the preparation and publication of their CRG's UCS data, and to the Project Board for supporting this project.

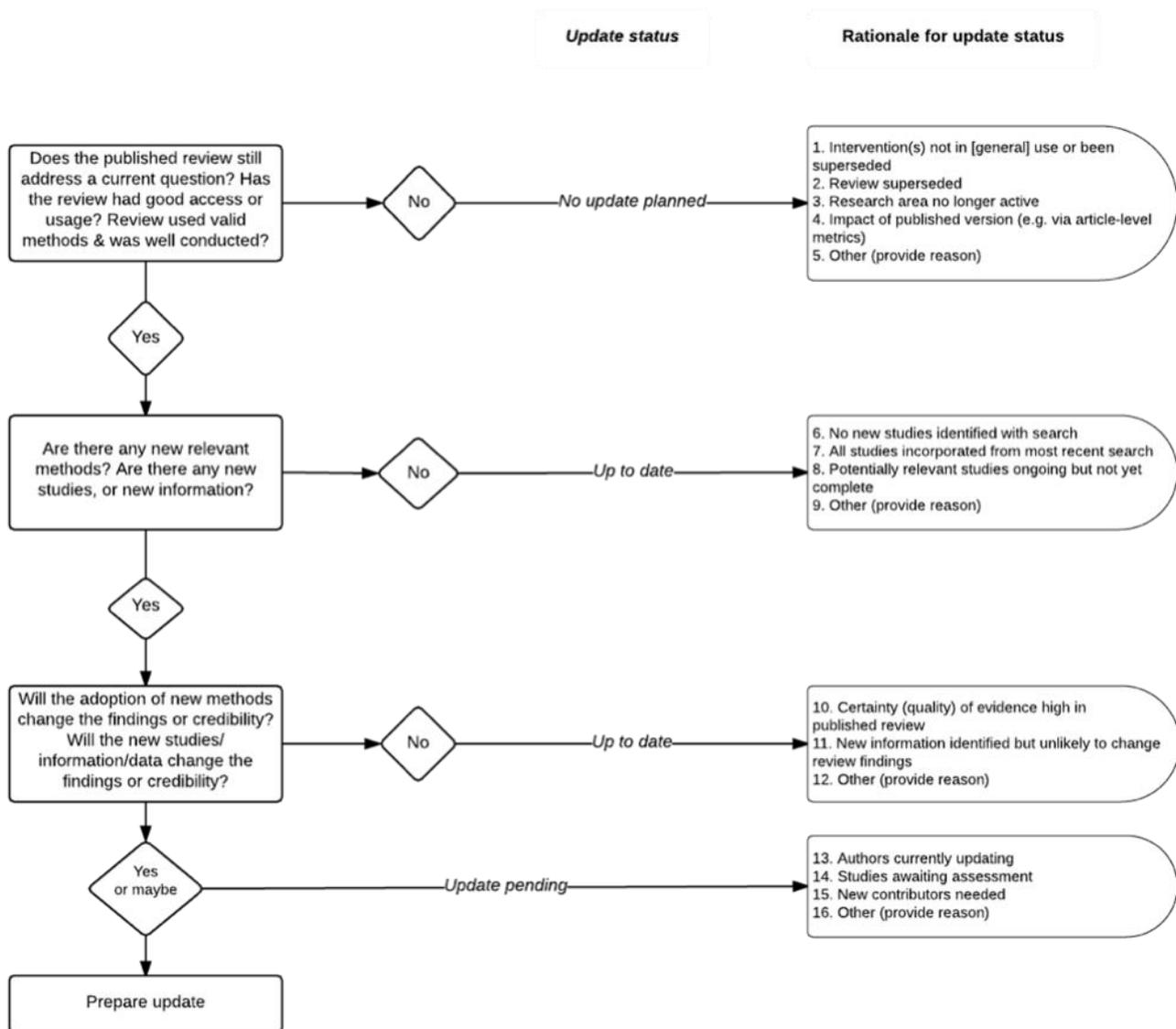
The Project Team also acknowledges that many CRGs have dedicated resource to classifying Cochrane Reviews using the UCS.

Appendices

Appendix 1. Updating Classification System decision-making flowchart to assess systematic reviews for updating, with standard terms to report these decisions

Extracted from the UCS guide:

<https://documentation.cochrane.org/display/EPPR/Guide+to+applying+to+Cochrane+Reviews>



Appendix 2. Updating Classification System development timeline

2012

Recommendation included in the report of the Cochrane Collaboration Strategic Summit



37. **Classify Cochrane Reviews of interventions using the classification framework, at least every two years.** The framework, to be published on the *Cochrane Database of Systematic Reviews*, highlights to readers whether a Cochrane Review addresses a historical or current question, and also indicates whether the Cochrane Review is considered up to date, has an update is pending, or is not intended to be updated.

2012/2013

Plan to publish the UCS included in the 2013 Cochrane Library publishing contract as part of the Cochrane Content Publication and Development Programme (CCPDP).

2014



Updating Cochrane Reviews Workshop
Programme and Information
for Speakers and Participants
26th and 27th June 2014
Health Forum, 4th Floor, Mill's Library, McMaster
University, Hamilton, Ontario, Canada



Time	Session title	Speaker, facilitator	Session structure	Objective and output
DAY 2	WHAT TO DO NOW, AND WHAT IS THE RESEARCH AGENDA?			
9.00	Recap from previous day	Sally Hopewell	Presentation	
	Session 5: Managing updates: Policy and Implementation	Chair: Jackie Chandler		
9.10	P15: Updating Classification System	Paul Garner	Presentation	Ob. 1
9.25	P16: Creating a toolkit of approaches for prioritisation of updates and authorship of updates	Rachel Marshall Harriet MacLehose Rachel Churchill and Emma Welsh	Presentation	Ob. 1 & 2
9.55	Discussion	All		
10.05	COFFEE			

2015

April: Presentation at the UK Cochrane meeting (remote).

October: Updating classification system workshop: Vienna Colloquium, 2015: workshop with a focus on user testing: system, Archie interface, and published review interface

2016

Paper published reporting on the 2014 workshop

Garner Paul, Hopewell Sally, Chandler Jackie, MacLehose Harriet, Akl Elie A, Beyene Joseph et al. When and how to update systematic reviews: consensus and checklist *BMJ* 2016; 354 :i3507



OPEN ACCESS

When and how to update systematic reviews: consensus and checklist

Paul Garner,¹ Sally Hopewell,² Jackie Chandler,³ Harriet MacLehose,³ Elie A Akl,^{5,6} Joseph Beyene,⁷ Stephanie Chang,⁸ Rachel Churchill,⁹ Karin Dearness,¹⁰ Gordon Guyatt,⁴ Carol Lefebvre,¹¹ Beth Liles,¹² Rachel Marshall,³ Laura Martínez García,¹³ Chris Mavergames,¹⁴ Mona Nasser,¹⁵ Amir Qaseem,^{16,17} Margaret Sampson,¹⁸ Karla Soares-Weiser,³ Yemisi Takwoingi,¹⁹ Lehana Thabane,^{4,20} Marialena Trivella,²¹ Peter Tugwell,²² Emma Welsh,²³ Ed C Wilson,²⁴ Holger J Schünemann^{4,5}

For numbered affiliations see end of article.
Correspondence to: P Garner

Updating of systematic reviews is generally more efficient than starting

mislead. For patients and other healthcare consumers, this means that care and policy development might not

2016

Function to assign the UCS to a Cochrane Review added in Archie.

Updating classification: From the editorial team

Update status:

Rationale:

Explanation (published):
 If a new full search: No potentially relevant new studies identified during the most recent search.
 If a scoping search: No potentially relevant new studies identified after a scoping search (electronic search strategy run in selected databases).
 The conclusions of this Cochrane Review are therefore still considered up-to-date.

Notes (internal):
test

Date Revised	DOI	Version No	Status	Rationale	Revised By
10/12/2015 18:3	CD008800.pub2	3.0	No update planne	Intervention not in general use or been superseded	Mehta, Monaz
18/11/2015 12:4	CD008800.pub2	3.0	Update pending	Other	Ahtirschi, Olga
18/11/2015 10:5	CD008800.pub2	3.0	Up-to-date	Other	Ahtirschi, Olga
18/11/2015 10:5	CD008800.pub2	3.0	Up-to-date	Other	Ahtirschi, Olga
18/11/2015 10:5	CD008800.pub2	3.0	Up-to-date	Other	Ahtirschi, Olga
03/11/2015 13:4	CD008800.pub2	3.0	Update pending	Authors currently updating	Moustgaard, Rasn

Publication status: Not published

2016

March: Presentation at the UK Cochrane Symposium.

July and September: Webinars about UCS and Archie.

October: workshop at the Cochrane Colloquium, Seoul.

2017

February/March: Update on the UCS publication shared with CRGs via the EMD Digest – publication delayed due to the development of the new Cochrane Library platform.

Updating classification system: update on publication

The Updating Classification System (UCS) guides readers as to whether a Cochrane Review is up to date, likely to be updated in future, or does not need updating at the current time. The UCS is available for Cochrane Review Groups (CRGs) to use for intervention and diagnostic test accuracy reviews. Over 10% of Cochrane Reviews have now been classified, with more than half of the CRGs having classified one or more Cochrane Review(s). We'll provide a brief report about the current use of the system and how reviews are being classified in the next Digest.

The intention has always been to publish the classifications alongside reviews in the Cochrane Database of Systematic Reviews (CDSR). The 'update status' (up to date, update pending, no longer updated), the rationale (from a pick list), and the free-text explanation as to how the rationale and status were reached will all be published. We are actively working on the timelines to publish this additional information (which is separate to the publication of review versions) and will provide an update in the next few weeks. The work on this phase of the roll-out is affected by the continued development on the new platform for the Cochrane Library. We are working with our colleagues and publishing partners to co-ordinate the projects, and we will provide an update in the next few weeks.

September: updating workshop at the Global Evidence Summit in Cape Town.

2018

August: Cochrane Library moved from the Wiley Online Library platform to an independent platform developed with Highwire. The function to publish UCS data from Archie was included as part of the development.

September: UCS update during the ME meeting, Edinburgh Cochrane Colloquium.

December: Following a review with key stakeholders of the UCS data in Archie and the publishing option, decision made to proceed with publication of the UCS.

2019

January: Project Publish UCS was set up.

November/December: decision to halt publication and project closed.

Appendix 3. Project form

Project name

Publish UCS (Long name: Publish UCS for intervention and DTA Cochrane Reviews)

People

Role	Who
Project Manager	Harriet MacLehose
Project Team	Sally Bell-Syer, Monaz Mehta, Harriet MacLehose
Project Sponsor	David Tovey/Karla Soares-Weiser
Project Board	Nicole Skoetz, Paul Garner, Emma Dennett, Clare Jess, Karla Soares-Weiser (Project Sponsor), Deborah Pentesco-Murphy, Toby Lasserson, Yemisi Takwoingi

Project scope

WHAT PROBLEM ARE YOU TRYING TO SOLVE?

The Updating Classification System (UCS) guides readers as to whether a Cochrane Review is up to date, likely to be updated in future, or does not need updating at the current time. The system can also help Cochrane Review Groups (CRGs) with prioritization decisions for individual Cochrane Reviews. The UCS follows a decision framework that asks about the usage and currency of the review question, the availability of new studies or information, and how new information would impact on the review; and also whether new methods will make important changes to the review.

The current version of the UCS was published as part of the paper that followed on from the 2014 two-day workshop on updating systematic reviews, organized by Cochrane and held at McMaster University; see <https://www.bmj.com/content/354/bmj.i3507>. Following this, Cochrane set up the ability to apply this to Cochrane Reviews in Archie; see guidance in <https://bit.ly/2NMIYH8>. We were not able to publish this information alongside the Cochrane Reviews on the old Cochrane Library platform, and therefore launching the new Cochrane Library platform was a dependency. The new Cochrane Library platform was released in August, and we are now in a position to start the publication.

The Editor in Chief approved the start of publication of UCS information in a meeting held with members of the Editorial Board and Managing Editors' Executive in December 2018. To enable this, this project was set up to ensure that the criteria for publication were agreed and met, and support and training was available to all editorial teams.

GOAL

All Cochrane Review Groups to have started publishing the 'update status' for published Cochrane Reviews (intervention and DTA) by the end of 2019.

OBJECTIVES

1. **Publication criteria:** Develop criteria that CRGs will need to meet before the CRG's UCS publication can be switched on by early March 2019. (Note: this will include that CRGs must have classified 2018 and 2019 reviews, as a minimum, as agreed at the December 2018 publication meeting.)
2. **Start publication:** Switch on publication of UCS for CRGs that meet criteria by end of March 2019.
3. **Strategy team:** Set up a team to provide guidance or proposals for strategies to address UCS workload and implementation issues by middle of March 2019.
4. **Training and support:** Provide training and support in using the UCS to all CRGs throughout 2019.

5. **UCS enhancements:** To continue to improve the UCS guidance, UCS framework (esp 'Other' category), and CLIB user experience through updates or change requests throughout 2019.
6. **Progress reports:** To monitor usage and user feedback of UCS to inform any future enhancements regularly throughout 2019.
7. **Communication - internal:** Communicate status of UCS publication to CRGs/Networks and contributors throughout 2019.
8. **Communication - Cochrane Library:** Communicate new UC feature to our readers (e.g. via an Editorial and CLIB website content) in line with Objective 2.

DELIVERABLES

1. Publishing criteria (as per Objective 1).
2. Training and support materials or sessions (as per Objective 4).
3. Updated UCS guidance doc (as per Objectives 3 and 5).
4. Proposals for enhancements for UCS framework and CLIB interface (as per Objective 5).

OUT OF SCOPE

- UCS related to other review types.
- Specific changes to the CLIB interface or publishing processes, including Archie to CLIB.

Alignment with organizational strategy

Which Strategy to 2020 goals will benefit from this project?

- Goal 1. Producing evidence: To produce high-quality, relevant, up-to-date systematic reviews, and other synthesized research evidence to inform health decision making.
- Goal 2. Making our evidence accessible: To make Cochrane evidence accessible and useful to everybody, everywhere in the world.

Alignment with EMD 2019 organization targets

Which 2019 Targets will benefit from this project? See Target details: <https://community.cochrane.org/sites/default/files/uploads/inline-files/Strategy%20to%202020%202019%20Targets.pdf>

(5) New Cochrane Library features: continue to deliver more features and enhancements in the Cochrane Library (Goal 3)

Project management process

It may be important to define the process to be used by the Project Manager. This could include, for example, the methodology (e.g. agile or waterfall), how the project will be planned and monitored (including frequency of Project Team and Project Board meetings), and how changes to key components would be managed (e.g. to scope or budget).

RESOURCE

Money	No additional budget allocated to this project.
Materials	None known at present.
People	Project Managers: 3 h/week Project Team: 3 h/week Project Board: 2 h/month Project Sponsor: 0.5 h/week Administrative support to be provided by Emma T for meetings Collaboration with Learning team (to follow up about this)

Systems	Confluence space will hold the project documents: Project Publish UCS (key documents currently in Dropbox) Dropbox folder: Dropbox (Cochrane)/Updating Classification System/Route to publication Possibly a Dropbox for key documents to share with Project Board Dedicated Slack channel(s) for Project Team communication (#project-ucs)/email for Project Board communication GoToMeeting for Project Board meetings
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Known dependencies

EPPR restructure (in relation to Objective 9).

Assumptions made

None.

Appendix 4. Why UCS publication failed

The ability to publish the UCS was developed and tested fully during the development of the Cochrane Library on the new platform, but we were not able to start publishing the UCS information until several months after the deployment of the new platform. The key learning point - which we are addressing with similar features - is that full additional testing is needed if there is significant time (e.g. several months) or significant product or production changes (e.g. changes to the interface or production pipeline that could impact the feature) between the feature development and release, so that we can check that the feature deploys as expected and that other CLIB developments have not inadvertently impacted the feature.

Four volunteer CRGs (Cochrane Airways; Cochrane Eyes and Vision; Cochrane Infectious Diseases; and Cochrane Gynaecological, Neuro-oncology and Orphan Cancers) used the UCS checklist and ensured the UCS information was up to date for their review portfolios. The UCS publishing functionality was activated for one of the groups (Cochrane Infectious Diseases) in May 2019 and the UCS information for that CRG was published on the Cochrane Library. We quickly noticed a number of bugs, so we held off publishing any further UCS information while those bugs were addressed. The most problematic bugs were fixed in August 2019 and we recommenced publishing of Cochrane Infectious Diseases UCS information in September 2019.

A bug that we had considered to be minor was the loss of publication statuses (e.g. Conclusions Changed, New Search) when UCS information was published. We subsequently realized that this bug was also affecting withdrawn reviews, which were no longer clearly displayed as withdrawn on the Cochrane Library. 'Withdrawn' is treated as a publication status. Further exploration revealed whenever UCS data was included the publication status was lost (e.g. if UCS data are added, then the publication status information is removed).

The Cochrane Library team (including Cochrane, Wiley, and HighWire) investigated this to understand the issue and identify a fix. Unfortunately, after lengthy investigations, we concluded that it was not possible to fix due to the way the UCS data was set up to publish from the outset. This was clearly highly disappointing for everyone involved and we recognized that many people, including the Project Board and particularly the four volunteer CRGs working with us, had invested time and resources into preparing UCS data for publication and for supporting this project.

We restored the withdrawn status to the withdrawn reviews, and the UCS publishing feature was deactivated as in Archie and scheduled to remove from the Cochrane Library for Cochrane Infectious Diseases reviews. There was no publication of UCS from the other three CRGs that had prepared UCS data for publication.

Table 2. Bugs identified after publication of the CIDG UCS

No.	Status	Ticket number and details
1	Fail	CLIBBL-3838: clStatus overwritten with UNCHANGED for reviews with UCS (impacts 'Status' filter on search results) This bug means that the 'Publication status' (see image) information is removed from Cochrane Reviews published with UCS data. Therefore it is missing from the top of reviews and also doesn't display on the search results page. A more important discovery was that the 'withdrawn' status was removed from Cochrane Reviews published as withdrawn because 'withdrawn' is a status in Archie and not a publishing event.
2	Open	CLIBBL-3911: Update Status misaligned in Safari This is a minor bug affecting user of Safari only. Minor bugs are of a lower priority than Critical or Major bugs. Cephalic version by moxibustion for breech presentation Meaghan E Coyle, Caroline A Smith, Brian Peat Intervention Review 16 May 2012 New search Conclusions changed

No.	Status	Ticket number and details
3	Closed	ECLIB-558: Erratic availability of CD012688.pub2 This one review was impacted for a short period after UCS publication, and the issue was resolved.
4	Closed	ECLIB-566/CIT-249: UCS/update status: update status displaying for review from 2 x IBD, 1 x Musculoskeletal, 1 x Schizophrenia. The UCS publication should have taken place for CIDG only, and we identified that some UCS displayed for other CRGs. We contacted the CRGs and helped with a fix to remove this information. All UCS publication was switched off until this was fixed by the ITS team
5	Closed	CLIBBL-3822: Update Status filter appears sporadically This impacted the search results page only.
6	Closed	CLIBBL-3834: Cochrane Reviews sent to XDPS as UNCHANGED should not have translations removed This bug meant that the translations were deleted when UCS added (and review not republished with publishing event). A manual fix was applied to existing reviews and a fix put in place to prevent this happening going forward.
7	Closed	CLIBBL-3825: Update classification status rationale different on search results and article page The Rationale that shows on the search results is different to the Rationale that displays in the 'Information' panel in the review. The correct Rationale is that showing on the review (and is the one in the XML). This means that readers are seeing incorrect information on the search results page, and the work that the editorial teams have completed is not showing accurately.
8	Closed	CLIBBL-3833: Text not aligned in Information panel (impacted some browsers only) This impacted the display on the review Information panel only.
9	Closed	CLIBBL-3832: Update status/UCS: icon not aligned on search result page (Safari only) This impacted the display on the search results page panel only.
10	Closed	CLIBBL-3869: research ticket to find out how incorrect Spanish UCS translations are appearing on the site

Appendix 5. Progress against the Project Publish UCS objectives

Objective	Update
<p>1. Publication criteria: Develop criteria that CRGs will need to meet before the CRG's UCS publication can be switched on by early March 2019. (<i>Note: this will include that CRGs must have classified 2018 and 2019 reviews, as a minimum, as agreed at the December 2018 publication meeting.</i>)</p>	<p>Done: Updating Classification System (UCS) pre-publication checklist</p>
<p>2. Start publication: Switch on publication of UCS for CRGs that meet criteria by end of March 2019.</p>	<p>4 volunteer CRGs have used the checklist: Airways; Eyes and Vision; Infectious Diseases (CIDG); and the Cochrane Gynaecological, Neuro-oncology and Orphan Cancers Group CIDG UCS published in May (and the other CRGs were due to follow)</p> <p>Publication of CIDG UCS took place, but there were a number of bugs that blocked publication of the other CRGs.</p> <p>As a result, the publication of the other pilot CRGs was put on hold and the UCS publication for CIDG was also stopped (preventing updates of existing UCS or adding UCS for new reviews).</p> <p>The bugs considered 'blockers' were fixed by mid-August, and we took the decision to switch on the CIDG reviews again, and planned to continue with the other CRGs shortly after.</p> <p>CIDG UCS publication restarted on 17 Sep 2019. We identified that an existing bug (not considered a blocker) caused a side issue affecting withdrawn reviews that had not been picked up. This specific bug is being addressed as a priority and is a blocker for publishing the UCS of the other pilot CRGs.</p> <p>As of November, the publication pipeline system for UCS data was identified as not being fit for purpose and not possible to fix. No publication can proceed using the current system, and the existing UCS will need to be hidden from view (and UCS publication for CIDG stopped from Archie).</p>
<p>3. Strategy team: Set up a team to provide guidance or proposals for strategies to address UCS workload and implementation issues by middle of March 2019.</p>	<p>Remit drafted: to provide guidance or proposals for strategies to address UCS workload and implementation issues. This will include working through and providing solutions to issues that are raised by people implementing the UCS for Cochrane Reviews.</p> <p>UCS inbox and support space set up.</p>

Objective	Update
	<p>Next steps to invite participants.</p> <p>No further developments as the focus has been on publication.</p>
<p>4. Training and support: Provide training and support in using the UCS to all CRGs throughout 2019.</p>	<p>Meeting held in Q2 with Chris Watts, Learning Manager (Cochrane Membership, Learning, and Support Services). The main outcome of the meeting was defining audiences for training/support and setting out plans for training/support for the different audiences. See below.</p> <p>Team has worked on defining the content of the different training events: Obj 4. Training and support.</p> <p>No further developments since Q2 due to ongoing issues with publishing UCS. Being able to publish is a dependency for engaging CRGs and for training and support.</p>
<p>5. UCS enhancements: To continue to improve the UCS guidance, UCS framework (esp 'Other' category), and CLIB user experience through updates or change requests throughout 2019.</p>	<p>UCS guide: baseline revision published (https://community.cochrane.org/editorial-and-publishing-policy-resource/cochrane-review-management/updating-classification-system-cochrane-reviews).</p> <p>Documented changes for Archie and CLIB that are currently out of scope but working to see if can be addressed, such as making URLs active links in CDSR (this is now listed for CLIB development in Q4, 2019).</p>
<p>6. Progress reports: To monitor usage and user feedback of UCS to inform any future enhancements regularly throughout 2019.</p>	<p>Was planned to start after publication.</p>
<p>7. Communication - internal: Communicate status of UCS publication to CRGs/Networks and contributors throughout 2019.</p>	<p>Updates included in ME Support Digest and information added to new EMD project page (https://community.cochrane.org/organizational-info/people/cet-teams/cochrane-editorial-unit/projects#epu)</p> <p>Limited communications since Q2 due to the challenges with publication.</p>
<p>8. Communication - external: Communicate new UC feature to our readers (e.g. via an Editorial and CLIB website content) in line with Objective 2.</p>	<p>Information has been included in the CLIB to explain the UCS information available: https://www.cochranelibrary.com/cdsr/about-cdsr. We didn't intend on communicating more widely until more UCS content has been published.</p>

Appendix 6. Retrospective notes: what went well and not well?

What went well?

Theme	Feedback
Project management	Met some of the project objectives and had good progress where possible.
	Resources - systems: Confluence and Slack have been v useful for this project. Also used GTM for meetings (internal and external).
	Formal project approach essential for this project to track progress and manage.
Communication	Where able to communicate info, were able to.
	Responsive to queries from CRGs about the UCS.
Teamwork	Volunteer CRG MEs were engaged and supportive, and provided valuable feedback.
	Team worked well together.
CRG engagement	For CRGs, in applying classification, gave MEs opportunity to engage with wider editorial team about how to engage with updating CRs. Discussion may not have taken place without it.
	Unanticipated benefit - v positive feedback on using UCS as part of prioritization exercises (and also helping with workload and updates).
	UCS exercise has been good internally to help with workload
EMD Support	Helpful for the UCS team in the EMD to review the UCS pre-publication.
	The EMD UCS support team needs to be available to respond to comments (and therefore have this as part of workplans with dedicated resource allocated to this).

What didn't go well?

Theme	Feedback
Project management	Project didn't complete as expected; publication blocker.
	Resources - systems: started out using Smartsheet, but this kind of went on hold when we had the publication blockers.
Publication	General lack of certainty if a fix would be possible and the time that it would take. Took a while until had clarity about what was happening. This generated a new (and unexpected) dependency that had a major impact on the project timeline. Need to have learning from this for EMD/PRD going forward. Major impact for Project Team in terms of impact on the project and how the Project Team (public-facing) had to communicate the issues.
	For CLIB bugs, no clear owner in the CLIB team (for the 'go to' person).

Theme	Feedback
	<p>On initial publication, different and unexpected bugs. The UCS, as it had been built in the CLIB, didn't function as expected when it went live.*</p> <p>2 bugs that weren't fixed for some time had potential reputational risk issues and were really challenging (embarrassing) for the project team: (1) Hard coded wrong update statuses and rationales on the search results page; and (2) Withdrawn not displaying on CIDG reviews for up to several months. (e.g. headlice review when there was a focus on this at start of school year in UK).</p> <p>For CRGs, frustrating to have applied UCS to all reviews in CRG portfolio and then be told it is not possible to publish these.</p> <p>Important to ensure that the way the UCS is displayed to readers is meaningful (and therefore means the work done by CRGs is useful to readers)</p> <p>Frustrating for CRGs to have the publication part of UCS constantly delayed due to publishing issues.</p> <p>Cochrane needs confirmation from users that the UCS is meaningful.</p> <p>Cochrane needs confirmation from users that having the UCS applied to some (and not all Cochrane Reviews) is not confusing or unhelpful.</p>
Archie	<p>Couldn't implement the volunteer CRG feedback in Archie/CLIB (as these were out of scope). A challenge that they were out of scope. Also Archie not being developed during this time.</p> <p>CRGs must be confident that they have a way to maintain and revise UCS as needed; this may mean both systems to alert teams to the need to review/revise (<i>Archie</i>) and resource to do the work to review/revise (<i>CRG workload</i>).</p> <p>Having to review bulk UCS reports in Excel because the reports can provide reports as needed is not helpful - this should be contained in one system.</p>
Communication	<p>V difficult to know what to communicate and when and to whom. Would be better to share uncertainties in the project (e.g. not formal risks or issues, but things to share).</p> <p>Communication about the UCS will be a challenge because editorial teams have been told to do this and that because the UCS is coming.</p>
UCS decision-making flowchart	<p>Flowchart not easy to use if you don't have the information available to complete the steps. The flowchart takes a long time to complete.</p> <p>Flowchart structure doesn't allow for a combination of scenarios.</p> <p>Flowchart - and guidance on how to use it - needs to be well understood and easy to use by all so that it is used and applied in a common way.</p> <p>Different approaches to working through the flowchart - using methods (e.g. to get a statement of fact) or using editorial knowledge (e.g. editorial judgement), and differing views on the approach to take amongst the people who have been involved in the project.</p> <p>Concerned about the 'update pending' status where can give a date for the review to be published; worried that it may be difficult to achieve this and therefore not meet the public commitment around this, which could be embarrassing</p>
CRG workload	<p>Sustainability concerns: It's unclear how to keep on top of updating the UCS.</p>

Theme	Feedback
	<p>It's a lot of work to apply the UCS to all reviews (and maintain this). Not sustainable to do this, esp where the CRG scope is broad.</p>
	<p>The workload for UCS has been with Managing Editors when this was intended to be with Editors and topic specialists in collaboration with authors.</p>
	<p>The CRG Editors need to 'buy in' to the UCS in order to support its use. Currently, there is a concern that this is mainly a focus for MEs. CRG target audiences need to be identified, and training and comms need to reach all key members.</p>
	<p>Important to get 'buy in' of Managing Editors</p>
	<p>Working through the UCS is time-consuming (and by extension potentially prohibitive for large portfolios).</p>
	<p>CRGs must be confident that they have a way to maintain and revise UCS as needed; this may mean both systems to alert teams to the need to review/revise (<i>Archie</i>) and resource to do the work to review/revise (<i>CRG workload</i>).</p>
	<p>Challenge for CRGs to do the UCS alongside other work and initiatives (e.g. prioritization).</p>

Appendix 7. Learning points: what to keep doing and what to do differently next time

What to keep doing?

Theme	Feedback
Communication	Have an easy route for CRGs to ask questions about the UCS (such as via a specific email address or HappyFox instance).
Teamwork	Engage with a small group of CRGs to be early adopters and provide feedback and help with testing
CRG development	Unanticipated benefit - v positive feedback on using UCS as part of prioritization exercises (and also helping with workload and updates).
EMD Support	Keep a team of UCS subject matter experts in place to review the UCS pre-publication.
	The EMD UCS support team needs to be available to respond to comments (and therefore have this as part of workplans with dedicated resource allocated to this).
CRG engagement	Ensure Managing Editors and Co-ordinating Editors are involved in decisions about next steps.
Project management	Resources - systems: Have a well-managed Confluence space; set up Slack channels (been beneficial to have a Slack channel for Project Teams comms); ensure GoToMeeting is available for team and other meetings; use webcams when possible.
	Set up the project formally and spend time doing this.
	Spend time setting up the Project Team and run exercises at the start on how to work together and ensure all have a shared understanding of the project and role(s) within the project. Have regular check-ins.
	Set up and support the Project Team and a group of CRGs/MEs to work with before the full roll out. A good working relationship between these groups is really important.
	Seek the support of a group of CRGs/MEs to work with before the full roll out, and build on their enthusiasm to help tease out problems on behalf of their CRG editorial colleagues.
	The team has handled things when they went well (such as working on, and communicating about, the publishing issues).

What should we do differently next time?

Theme	Feedback
Publication	When bugs arise that are potential blockers to an important project, escalate as soon as possible with CLIB Product Manager.
	Follow new processes in place for CLIB developments to develop any new UCS-related features (to avoid the issue with the feature not working as expected upon publication).
	Retest CLIB features (developed some time ago) before release.

Theme	Feedback
	<p>For CLIB bugs, need to have a clear owner in the CLIB team (for the 'go to' person). (On initial publication, different and unexpected bugs. The UCS, as it had been built in the CLIB, didn't function as expected when it went live.)</p> <p>Repeat end-to-end testing for a new CLIB feature in the run-up to release to increase confidence in the release</p> <p>Be assured that users will like the UCS output (both content and display) before asking CRGs to do the work and publish this. Therefore, run using testing of samples as part of UCS flowchart and publication development process. As part of this, check with users that having the UCS applied to some (and not all Cochrane Reviews) is not confusing or unhelpful.</p>
Archie	<p>Have changes to the editorial management system (Archie) 'in scope' instead of 'out of scope' because changes that were suggested by editorial users would make it easier to use the UCS and therefore probably improve uptake and confidence in system; for example: Ensure that Archie/EMS is able to provide the reports required by CRGs so that all reports can be run within one system and not have to export data to Excel to run further analysis (e.g. Archie reports tab gave an incomplete UCS report as it did not include the explanation and the rationale which would have been useful to a ME in checking their overall UCS status.)</p>
UCS decision-making flowchart	<p>Flowchart: review and user test the flowchart to address some known issues: not easy to use if you don't have the information available to complete the steps takes a long time to complete flowchart structure doesn't allow for a combination of scenarios need to agree an approach to working through the flowchart as there have been different views on this in the project - i.e. using methods (e.g. to get a statement of fact) or using editorial knowledge (e.g. editorial judgement) - and therefore may not be applied in a common way review the option to put in a date of expected publication for the 'update pending' status; to address worry that it may be difficult to achieve this and therefore not meet the public commitment around this, which could be embarrassing</p>
CRG workload	<p>Do more analysis on the additional workload that setting up the UCS (i.e. assigning to reviews in the first instance) and maintaining involves. The view is that it's a lot of work to apply the UCS to all reviews (and maintain this). Feedback highlights that working through the UCS is time-consuming (and by extension potentially prohibitive for large portfolios), and, as part of this that it takes a long time to screen searches.</p> <p>Provide a way for CRGs to manage/keep on top of updating the UCS.</p> <p>Provide CRGs with automated prompts to use the UCS (and be reminded to update). (Note: the functionality in Archie is basic and was set up in around 2016 to be the 'minimum viable product' anticipating that this would be enhanced over time based on user feedback.)</p> <p>The workload for UCS has been with Managing Editors when this was intended to be with Editors and topic specialists in collaboration with authors. Need to find a way to address this.</p>

Theme	Feedback
	<p>The CRG Editors need to ‘buy in’ to the UCS in order to support its use. Currently, there is a concern that this is mainly a focus for MEs. CRG target audiences need to be identified, and training and comms need to reach all key members.</p> <p>Integrate UCS into ‘everyday work’ to avoid this be an additional and burdensome task; e.g. nudge approach.</p>
CRG engagement	<p>Important to get ‘buy in’ of Managing Editors and Co-ordinating Editors.</p> <p>Link up the UCS with other linked projects (such as prioritization where there were unanticipated benefits) and other projects within the Updating Programme.</p>
External user engagement	<p>Run some kind of user testing before we rolled anything out (rather than leaving to the end), esp as a key reason for the UCS is to benefit readers. Could have run this on test site and not waited for it to go live.</p>
Communication	<p>Engage with all members of the editorial teams, not just MEs (based on feedback from volunteer CRGs).</p> <p>Capture and share realistic information about how much time a CRG needs to apply a UCS (using different classifications).</p> <p>Engage with more CRGs on a more one-to-one basis to help develop the UCS. Take the learning from the volunteer CRGs and apply with more CRGs.</p> <p>Set and stick to a regular communications plan and schedule, and be ok to share uncertainties or just brief updates if no major updates.</p> <p>The CRGs need to have clear communications about the status of the UCS project.</p>
Project management/ Communication	<p>Engage more with the Project Board (irrespective of the message) as has been occasional and low feedback from PB towards the project end. Think of other ways (less formal) to communicate with PB (e.g. Slack).</p>
Project management	<p>Resource (budget): no budget assigned to this project, such for additional SME help or user testing or any meeting.</p> <p>Resource (people): potentially under-resourced if going to implement the full plan (e.g. training plan would have taken one person half a week for several weeks, and not allowed for this in the team).</p> <p>Was this project overambitious - what this actually a 3-year project with budget? How would we have spent time with all CRGs to get them on board (e.g. if the CRG is not familiar with the UCS or not yet started to use the UCS), manage changing editorial teams?</p> <p>Resource (systems): Use Smartsheet more effectively to track the project (was going well until hit the publication blockers)</p> <p>When there are major blockers, seek project management advice on how to adapt/rescope on the fly</p> <p>Spend more time on the planning and try and be more realistic with how long tasks take and who will do them (i.e. resource needed).</p> <p>Run more frequent retrospectives.</p> <p>Project management takes time and we need to think about resourcing of this.</p>

Appendix 8. Information about the ‘status’ of a Cochrane Review

<p>What info?</p>	<p>Where located in published Cochrane Review</p>									
<p>What’s New in this version</p> <p><i>Location in published Cochrane Review: History → What’s New (note: this displays the publication events)</i></p> <p><i>Where added in: RevMan (but should move to the EMS in future)</i></p>	<p>What's new</p> <table border="1"> <thead> <tr> <th>Date</th> <th>Event</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>9 February 2018</td> <td>Amended</td> <td>PLS title corrected to 'A single dose of primaquine added to malaria treatment to prevent malaria transmission'</td> </tr> </tbody> </table>	Date	Event	Description	9 February 2018	Amended	PLS title corrected to 'A single dose of primaquine added to malaria treatment to prevent malaria transmission'			
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<p>What’s happened in previous versions</p> <p><i>Location in published Cochrane Review: History → History</i></p> <p><i>Where added in: RevMan</i></p>	<p>History</p> <p>Protocol first published: Issue 4, 2009 Review first published: Issue 9, 2012</p> <table border="1"> <thead> <tr> <th>Date</th> <th>Event</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1 February 2018</td> <td>New search has been performed</td> <td>Search updated to 21 July 2017. We included seven new trials (Dicko 2016; Gonçalves 2016a; Gonçalves 2016b; Mwaiswelo 2016; Okebe 2016; Lin 2017; Tine 2017) and four additional publications from a previously included trial (Eziefula 2013).The new trials included direct measures of infectiousness of people to mosquitoes and these data were included.</td> </tr> <tr> <td>1 February 2018</td> <td>New citation required and conclusions</td> <td>This is an update of a review last updated in 2015.</td> </tr> </tbody> </table>	Date	Event	Description	1 February 2018	New search has been performed	Search updated to 21 July 2017. We included seven new trials (Dicko 2016; Gonçalves 2016a; Gonçalves 2016b; Mwaiswelo 2016; Okebe 2016; Lin 2017; Tine 2017) and four additional publications from a previously included trial (Eziefula 2013).The new trials included direct measures of infectiousness of people to mosquitoes and these data were included.	1 February 2018	New citation required and conclusions	This is an update of a review last updated in 2015.
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1 February 2018	New search has been performed	Search updated to 21 July 2017. We included seven new trials (Dicko 2016; Gonçalves 2016a; Gonçalves 2016b; Mwaiswelo 2016; Okebe 2016; Lin 2017; Tine 2017) and four additional publications from a previously included trial (Eziefula 2013).The new trials included direct measures of infectiousness of people to mosquitoes and these data were included.								
1 February 2018	New citation required and conclusions	This is an update of a review last updated in 2015.								
<p>Publication date</p> <p><i>Location in published Cochrane Review: Top of article/ Information</i></p> <p><i>Where added in: Automated</i></p>	<p>Cochrane Database of Systematic Reviews</p> <p>Primaquine or other 8-aminoquinolines for reducing <i>Plasmodium falciparum</i> transmission</p> <p>Cochrane Systematic Review - Intervention Version published: 02 February 2018 see what's new</p> <p>https://doi.org/10.1002/14651858.CD008152.pub5</p> <p>Information</p> <p>DOI: https://doi.org/10.1002/14651858.CD008152.pub5 Copy DOI </p> <p>Database: Cochrane Database of Systematic Reviews</p> <p>Version published: 02 February 2018 see what's new</p>									

What info?	Where located in published Cochrane Review
<p>Search date</p> <p><i>Location in published Cochrane Review: Abstract/ Methods</i></p> <p><i>Where added in: RevMan</i></p>	<p>Search methods</p> <p>We searched the Cochrane Infectious Diseases Group Specialized Register; the Cochrane Central Register of Controlled Trials (CENTRAL), published in the Cochrane Library; and the WHO International Clinical Trials Registry Platform (ICTRP) portal using 'malaria*', 'falciparum', 'primaquine', '8-aminoquinoline', and eight 8AQ drug names as search terms. We checked reference lists of included trials, and contacted researchers and organizations. Date of last search: 21 July 2017.</p>
<p>How up to date is this review?</p> <p><i>Location in published Cochrane Review: PLS (some reviews)</i></p> <p><i>Where added in: RevMan</i></p>	<p>How up to date is this review?</p> <p>The review authors searched for trials published up to 4 March 2019.</p> <p>https://doi.org/10.1002/14651858.CD009359.pub2</p>
<p>UCS info</p> <p><i>Location in published Cochrane Review: Information</i></p> <p><i>Where added in: Archie</i></p>	<p>Classified:</p> <p> Up to date</p> <p>All studies incorporated from most recent search</p> <p>All eligible published studies found in the last search (21 Jul, 2017) were included and eight ongoing studies have been identified (see 'Characteristics of ongoing studies' section)</p> <p>Assessed: 12 April 2019</p>

Appendix 9. Percentage of UCS status classified by CRG

We assessed the percentage of Cochrane Reviews (intervention and DTA) with a UCS status by CRG in August 2018. A comparison was carried out in December 2019 and showed 12 CRGs had achieved good increases in the number of classifications achieved over that period. Most CRGs remained stable in the number of classifications achieved and this is probably due to the uncertainty over the timing of publication and the absence of any communications signalling timelines to publication.

Table 3 shows the number of Cochrane Reviews with a UCS applied in 2018 and in 2019 (by CRG). Table 4 shows this by Network in terms of percentage of the CRG's portfolio with a UCS.

Table 3. Number of Cochrane Review with UCS: 2018 vs 2019

Group	August 2018				December 2019			
	Total	UCS	No UCS	%	Total	UCS	No UCS	%
ARI	172	166	6	96	182	167	15	92
Airways	352	135	217	38	371	166	205	45
Anaesthesia*	225	92	133	40	141	57	84	40
Emergency Care					110	5	105	5
Back and Neck	80	4	76	5	85	4	81	5
Bone Joint MT	146	0	146	0	151	0	151	0
Breast Ca	68	25	43	36	72	41	31	57
Child Ca	34	0	34	0	36	0	36	0
Colorectal	115	1	115	0	119	1	118	0
CMD	177	2	175	0	189	47	142	25
Consumers	58	54	4	93	67	57	10	85
Cystic Fib	177	105	72	59	190	111	79	58
Dementia	130	92	38	70	161	147	14	91
Dev Psc LP	164	19	145	11	177	31	146	17
Drugs & Alcohol	87	0	87	0	92	0	92	0
EPOC	127	120	7	94	149	124	25	83
ENT	124	89	35	66	135	102	33	75
Epilepsy	103	40	63	38	106	63	43	59
Eyes & Vision	192	114	78	59	208	138	70	66
Fertility Reg	81	2	79	2	84	14	70	16
Gyn Neuro Orph	178	136	42	76	203	169	34	83
Gyn & Fert	236	194	42	82	259	198	61	76
Haematology	76	63	13	83	82	66	16	80
Heart	186	120	66	64	194	168	26	87
Hepato-Biliary	203	21	182	10	230	27	203	12
HIV/AIDS	101	99	2	98	101	99	2	98
Hypertension	66	33	33	50	70	33	37	47

IBD	80	0	80	0	96	0	96	0
Incontinence	84	13	71	15	86	26	60	30
Infect Dis	155	143	12	92	181	180	1	99
Injuries	137	19	118	13	147	18	129	12
Kidney	171	90	81	52	196	112	84	57
Lung Ca	38	12	27	31	41	17	24	41
Metab & Endocr	125	23	102	18	136	111	25	82
Methodology		0						
Movement Dis	67	8	59	11	69	11	58	16
Mult Scler	58	53	5	91	63	50	13	79
Musculoskeletal	203	3	200	1	218	8	210	4
Neonatal	373	27	346	7	394	31	363	8
Neuromusc	133	119	14	89	143	118	25	83
Oral Health	184	1	183	0	196	2	194	1
Pain	285	212	73	66	308	174	134	56
Preg & Child	530	95	435	18	646	101	545	16
Public Health	26	6	20	23	35	21	14	60
Schizo	228	188	40	82	241	197	44	82
Skin	90	80	10	88	114	86	28	75
STI	18	1	17	0	21	1	20	5
Stroke	193	31	162	16	201	34	167	17
Tobacco	80	71	9	88	85	71	14	84
Upper GI	100	8	92	8	112	11	101	9
Urology	73	5	68	6	77	3	74	4
Vascular	161	51	110	31	172	56	116	33
Work	39	0	39	0	43	1	42	2
Wounds	152	138	14	90	160	141	19	88

*Anaesthesia and Emergency Care was split into two CRGs in 2019.

Table 4. Percentage of CRG review portfolio with a UCS (*if changed between 2018 and 2019)

Network	Up to 25%	26% to 50%	51% to 75%	76% to 100%
Acute	Bone Joint MT Injuries	Anaesthesia [^]	—	ARI
Brain	CMD Dev Psy Soc Drugs & Alcohol Movement Dis	Epilepsy*	Dementia Epilepsy* [2019]	Multiple sclerosis Neuromusc Schizophrenia
Cancer	Child Ca Colorectal C Urology	Breast Ca Lung Ca	Breast Ca* [2019]	Gyn Neuro Orph Haemat Malig
Children	Fertility Reg Incontinence* Neonatal Preg & Child STI	Incontinence* [2019]	Cystic Fibrosis	Gyn & Fert
Circulation	Stroke	Airways Hypertension Vascular	Heart*	Heart* [2019]
LTC1	Hepato Biliary IBD Metabol & Endocr* Upper GI	—	Kidney	Metabol & End* [2019]
LTC2	Back and Neck Oral Health Musculoskeletal	—	Pain ENT Eyes & Vision	Skin Wounds
Public Health	Public Health* Work	—	Public Health* [2019]	Consumers EPOC HIV/AIDS Infect Diseases Tobacco

[^]Anaesthesia and Emergency Care was split into two CRGs in 2019.

Appendix 10. What's New event of 'no longer update': proposed new guidance

Information about reviews published with a 'no update planned' What's New event is missing from the EPPR. The text from the 2008 Handbook could be added (option 1 in Table 5; note that this is no longer included in the Handbook) or incorporate elements of the UCS (option 2 in Table 5) because there is a clear overlap. (Note that the 2019 Handbook does not include the What's New events and these are now located in the EPPR only.) While it looks consistent to add in the UCS 'no longer updated' options, there are two 'up to date' options that could also apply and that are also similar to those used in the 2008 Handbook: certainty (quality) of evidence high in published review; and new information identified but unlikely to change review findings.

The Project Team recommends including the Option 2 (Table 5) in the EPPR and accompanying this with the standardized texts set out in Table 6.

Table 5. 'What's New' events for Cochrane Reviews: focus on no longer updated/stable

OPTIONS	Type of change	Conclusions changed?	New citation version?	What's New events to selection
Option 1 (as is)	<p>A review that is no longer being updated is one that is highly likely to maintain its current relevant for the foreseeable further (measured in years rather than months). Situations in which a review may be declared to be no longer updated include:</p> <ul style="list-style-type: none"> the intervention is superseded (bearing in mind that Cochrane Reviews should be internationally relevant); the conclusion is so certain that the addition of new information will not change it, and there are no foreseeable adverse effects of the intervention. <p>The review remains 'no longer updated' as long as the most recent 'What's new' entry is a declaration of a 'no longer updated' review. If a subsequent 'What's New' entry is added, the review is considered to be in line for updating as for other Cochrane Reviews.</p>	N	N	(1) No longer updated
Option 2 (bringing in elements from the UCS)	<p>A review that is no longer being updated is one that is highly likely to maintain its current relevant for the foreseeable further (measured in years rather than months). Situations in which a review may be declared to be no longer updated include:</p> <ul style="list-style-type: none"> Intervention not in general use or been superseded Review superseded Research area no longer active Impact of published version Certainty (quality) of evidence high in published review New information identified but unlikely to change review findings <p>The review remains 'no longer updated' as long as the most recent 'What's new' entry is a declaration of a 'no longer updated' review. If a subsequent</p>	N	N	(1) No longer updated (see notes below on how to draft the What's New text)

	'What's New' entry is added, the review is considered to be in line for updating as for other Cochrane Reviews.			
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Table 6. Templates for the What's New free text for reviews that are 'no longer being updated'

Reviews of interventions		Reviews of diagnostic test accuracy	
Reason for no longer updating	Explanation: free-text box with proposed sample text	Reason for no longer updating	Explanation: free-text box with proposed sample text
Intervention(s) not in [general] use or been superseded	<p>If intervention superseded: The [Intervention] has been replaced by [Newer intervention] and is no longer used [in general]. See [link to another Cochrane Review] for the [Newer intervention].</p> <p>If intervention withdrawn or no longer available: The [Intervention] has been withdrawn from the market worldwide because [reason for withdrawal (e.g. causes serious adverse effects)].</p>	Index test(s) or reference standard not in general use or been superseded	<p>If test or reference standard superseded: The [test(s) or reference standard] has been replaced by [insert] and is no longer used [in general]. See [link to another Cochrane Review] for the [Newer test].</p> <p>If test or reference standard withdrawn or no longer available: The [test(s) or reference standard] has been withdrawn from the market worldwide because [reason for withdrawal (e.g. causes serious adverse effects)].</p>
Review superseded	This Cochrane Review has been superseded because [it has been merged together with another review/split into two or more reviews]. See [insert link to review].	Review superseded	This Cochrane Review has been superseded because [it has been merged together with another review/split into two or more reviews]. See [insert link to review].
Research area no longer active	[insert reason, such as no new studies expected in this area or ethical reasons].	Research area no longer active	[Insert reason, such as no new studies expected in this area or ethical reasons].
Impact of published version	[This Cochrane Review has had low usage or impact and is not a priority for updating.]	Impact of published version	[This Cochrane Review has had low usage or impact and is not a priority for updating.]
Certainty (quality) of evidence high in published review	There is high-quality evidence that [Intervention] [is not effective/is effective] meaning further research is unlikely to change our confidence in the estimate of effect.	Certainty of evidence high in published version	There is high-quality evidence and further research is unlikely to change our confidence in the estimates of test accuracy.
New information identified but unlikely to change review findings	[A new study has OR new studies have] been identified with a recent search but the new information is unlikely to change the review findings [as assessed by Editors/using a specific tool/other]. The conclusions of this Cochrane Review are therefore still considered up to date.	New information identified but unlikely to change review findings	[A new study has OR new studies have] been identified with a recent search but the new information is unlikely to change the review findings [as assessed by Editors/using a specific tool/other]. The conclusions of this Cochrane Review are therefore still considered up to date.