

Cochrane Ireland Training Course Application Guidance Notes

Background

The bringing together of evidence from research in systematic reviews to help inform decision-making is increasingly common, not least because of the formation of the Cochrane Collaboration with its aim to prepare, maintain and promote the accessibility of reviews of the effects of interventions in all areas of health care. Systematic reviews are a vital part not only of the process of summarising existing research but also in the process of planning future studies. For example, ethics committees, research funders and healthcare policy makers require that systematic reviews be done in advance of new research.

Traditional narrative reviews, usually written by a recognised expert, are generally not systematic. Authors might simply not have the time to identify and bring together all the relevant research or they might actually seek to discuss and selectively combine studies that confirm their opinions and biases. A systematic review aims to circumvent this weakness by using a predefined, explicit methodology. The methods used include steps to minimise bias in the identification of relevant studies, the selection criteria for inclusion, and the collection and presentation of data. Systematic reviews also critically appraise studies, an important skill for all evidence users.

Since 1993, the Cochrane Collaboration, through the establishment of Cochrane Review Groups across healthcare topics, has been preparing systematic reviews (Cochrane reviews) of the effects of interventions. These are published in full, in electronic form, in *The Cochrane Library*. There are now more than 8500 full reviews, together with protocols for a further 4000 reviews to be conducted. Access to the Cochrane Library is available free of charge to anyone with internet access on the island of Ireland using <http://www.cochranelibrary.com/> because of sponsorship by the Health Research Board (HRB) in Dublin and the Health and Social Care Research & Development Division (HSC R&D Division), Public Health Agency, in Northern Ireland.

To build capacity in the conduct of systematic reviews on the island of Ireland, and to develop critical appraisal and systematic reviewing skills, the HRB and HSC R&D Division have run a series of annual training courses since 2002 in association with the Training Team of the UK Cochrane Centre. In 2014, Cochrane Ireland was created to further this work through the appointment of a Convenor. In 2015, the portfolio of training courses continues to offer a more intensive two-day course on systematic reviewing (see Appendix 1) and will be supplemented with a suite of one-day training courses (see Appendix 2). More details on the one-day courses will be announced as they are developed.

These courses will be led by trainers from the Training Team in Cochrane Ireland along with personnel from the UK Cochrane Centre.

Eligibility

These courses will be particularly suitable for health and social care professionals, researchers and policy makers who require an understanding of the importance of evidence-based practice and who wish to improve their practice and critical appraisal skills, or who wish to conduct a systematic review in the near future.

Before applying, applicants should carefully examine which course is more suited to their backgrounds, experience, and previous engagement with critical appraisal and systematic reviewing.

Please note the courses are free but applicants will need to fund their own travel and accommodation if required.

Dates and venues for courses

A series of four **two-day** training courses will be held throughout the island and every effort will be made to offer courses in locations that suit successful applicants. The proposed dates and venues for these two-day courses in 2015 are as follows:

- Belfast (2 & 3 September 2015)
- Cork (2 & 3 June 2015)
- Dublin (19 & 20 October 2015)
- Galway (25 & 26 June 2015)

The **new one-day** training courses will be scheduled according to the level of interest in each course and in locations that suit successful applicants. These will be announced when places are offered in early June.

Application Process

Read Appendix 1 and Appendix 2 at the end of this guidance document **before** filling in the application form. The content of each course and who it is aimed at are described there and will help you decide which course is most suitable to your experience and needs. Complete the short application form on the Cochrane Ireland website (<http://ireland.cochrane.org/cochrane-training-courses-2015>) and return as an attachment to an email sent to Cochrane Ireland at Cochrane@dcu.ie no later than **Monday 11 May 2015**.

Applicants will be informed about their success in attaining a place on these courses and will receive confirmation of training dates early in June.

Applicants from any part of Ireland should submit their applications and address any enquiries to Cochrane Ireland, not HRB or HSC R&D. Please note that the Convenor of Cochrane Ireland is a two day per week part-time position. Please allow for this in expectations of response times.

Dónal O'Mathúna
Convenor, Cochrane Ireland
School of Nursing & Human Sciences
Dublin City University
Glasnevin
Dublin 9

p: +353 1 700 6811

e: Cochrane@dcu.ie

w: <http://ireland.cochrane.org>

f: www.facebook.com/CochraneIreland

t: @CochraneIreland

APPENDIX 1



Title of course **Cochrane Systematic Review Course**

Duration of Course Two days

Eligibility Participants should have an understanding of research processes and be familiar with the Cochrane Library and systematic reviews

Aim

The 2-day training course will continue to be offered as it has in recent years. This intensive two-day course will cover systematic review methodologies and critical appraisal skills. The course is suitable for individuals working in the health and social care area who are planning to conduct a systematic review themselves and require more detailed knowledge of systematic reviews.

Expected Outcomes

Having completed the course, attendees should be able to:

- Outline the key components of a Cochrane review
- Explain the essential steps of planning, preparing and maintaining a systematic review, including formulating a review question, literature searching, data extraction, study quality assessment, and the basics of meta-analysis.

Topics Covered

- An introduction to systematic reviews and the Cochrane Collaboration
- Research study designs
- Study identification
- Statistical analysis and forest plots
- Critical appraisal
- Assessing study eligibility
- Data extraction
- Introduction to meta-analysis
- Heterogeneity
- Resources and what next?

APPENDIX 2



New one-day Cochrane Course options

These four new courses will be provided between September and the end of the 2015. Courses I and II are intended for those with no experience conducting systematic reviews and are not planning to conduct one themselves, but want to use the evidence they contain. Courses III and IV are intended for those with at least some systematic review experience and who are planning to conduct a systematic review.

I. The Cochrane Library and other databases. The course will provide an introduction to using the Cochrane Library and interpreting Cochrane systematic reviews. Other databases will be examined also. Database searching skills will be presented and used, including the use of MeSH search terms, Boolean characters and developing search strategies. The course is intended for individuals who may not be planning to conduct a systematic review themselves at this point.

II. Critical appraisal of systematic reviews and different types of study designs. The course is suitable for individuals for those who may not be planning do a systematic review at this point, but need to interpret and use their findings. Methods of evaluating the strengths and weaknesses of various trial types will be examined. The international standards for reporting various types of studies will be reviewing.

III. Systematic reviews of non-randomised studies of the effects of interventions. The course is suitable for individuals who are considering conducting systematic reviews of studies examining the effects of interventions with non-randomised designs, e.g. controlled before-and-after studies, cohort studies, interrupted-time-series. These types of reviews are more complex and challenging than other reviews and therefore those taking this course should have some experience of systematic reviewing. The methods of these reviews will be covered, including methods of assessing risk of bias in non-randomised trials. The focus will be on outcomes measuring the effects of interventions.

IV. Updating Cochrane reviews. The course is available only to authors of Cochrane reviews who are planning to update their review. The material will cover recent developments in Cochrane reviews and serve to refresh authors' skills in Cochrane methods.