#### Writing a systematic review workshop (2 Days)

Duration	2 days
Skill level	Introductory
Target Audience	Healthcare professionals, academics, researchers, decision makers and Evidence Synthesis Ireland fellows who have identified a review topic and are ready to begin working on their protocol.
Prerequisites	Have a basic knowledge of health research. Are interested in learning more on the methodology of a review. Participants are requested to install the RevMan software and bring their laptop to the workshop.
Registration fee	€150/80

### **Background**

Health care policy and practice decisions should be based on a synthesis of the global body of evidence rather than relying on individual studies. Cochrane Ireland and Evidence Synthesis Ireland promote evidence based healthcare policy and practice by supporting high quality, relevant systematic reviews and other synthesised research evidence.

#### Aim

This workshop provides authors, at the beginning of the Cochrane systematic review process, with an in-depth understanding of how Cochrane reviews are structured. It offers an insight to the development of a Cochrane protocol, introducing participants to Cochrane methodology, search methods, data extraction and meta-analysis. This workshop also includes an introduction to RevMan software and its use during protocol development.

### **Learning outcomes**

In this course participants will be enabled to:

- Understand the basic principles of a systematic review
- Identify the scope of their review
- Understand search methods and apply these methods to their search strategy
- Apply the criteria for selecting studies
- Understand the principles of creating a data collection form and of data extraction.
- Attain a basic understanding of principles of meta-analysis
- Identify heterogeneity and understand the methods for assessing and addressing it

# **Teaching strategies**

The workshop will consist of a mixture of short presentations, led by members of the Cochrane Ireland teaching faculty covering each of the stages of developing a systematic review protocol, small group activities and plenary discussions, providing participants with the opportunity to develop and refine their protocol. The number of participants for the course is limited to 25.

### Course content/timetable

DAY 1 -	Introduction to systematic reviews; developing the question and searching for studies	
08:30	Registration and coffee	
09:00	Welcome, introduction of presenters and outline of presentations	
09:15	Introduction to systematic reviews	
09.45	Writing a protocol	
10.15	Discussion and questions.	
10.30	Break	
10:45	Defining a review question – defining objectives and creating a PICO (population, interventions,	
	comparators, outcomes)	
11:45	Practical exercise with PICO development	
12:30	Lunch	
13:30	Identifying search terms and searching for relevant studies in a systematic way	
14:30	Practical exercise developing a search strategy	
15:15	Break	
15:30	Screening studies : assessing eligibility	
16:30	Discussion and questions	
16:45	Close	
DAY 2 -	Introduction to systematic reviews; Data extraction, meta-analysis and heterogeneity	
09:00	Welcome and introduction to day 2	
09:15	Assessing risk of bias	
10:15	Practical exercise on Risk of bias	
10:45	Break	
11:00	Data extraction and management; different types and formats of outcome data	
12:00	Practical exercise on Data extraction	
12:30	Lunch	
13:00	Meta-analysis methods for binary data (odds ratio, risk ratio)	
13.30	Meta-analysis methods for continuous data (mean difference, standardised mean difference) (DD)	
14.00	Introduction to meta-analysis	
14:30	Discussion & questions	
14:45	Break	
15:00	Exploring heterogeneity; subgroup analysis and sensitivity analysis	
15:45	Tools to support systematic reviews: Introduction to Review Manager (RevMan), Covidence and	
	Endnote	
16:15	Discussion and questions	

# Comments from previous participants attending this course

One of the most enjoyable and valuable courses I've attended in a very long time

Informative speakers, interactive sessions, fantastic content. Top notch.

Excellent use of examples from clinical research to demonstrate concepts and different perspectives from people in the field

I've learned more in this course in 2 days than I have in weeks of teaching on the topic.