

## **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 systematic review process, with an in-depth understanding of how reviews are planned and conducted. It offers an insight to the development of a protocol, introducing participants to methodology, search methods, data extraction, risk of bias assessment and meta-analysis.

## **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
- Understand the principles of risk of bias assessment
- Understand principles of heterogeneity and understand the methods for assessing and addressing it
- Attain a basic understanding of principles of meta-analysis

Date: 30th & 31st January, 4th & 5th February 2025

Time:

10:00 - 13:00 / 13:30

Skill Level: Introductory

**Facilitators:** 

### **Prof. Declan Devane**

Professor of Health Research Methodology, University of Galway. Director, Evidence Synthesis Ireland, & Cochrane Ireland.

#### Ciara Gleeson

Clinical Specialist Physiotherapist, Respiratory Assessment Unit, St. James's Hospital, Dublin.

## **Dr. KM Saif-Ur-Rahman** Research Fellow. University

of Galway. Senior Research Methodologist, Evidence Synthesis Ireland.

#### Places:

25 places available for individuals who are resident on the island of Ireland

Fee:

General €150 Student €80











## **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.

## **Teaching Strategies:**

The workshop will consist of a mixture of short presentations, led by members of the Cochrane lreland 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. This course will include blended learning with two months free access to Cochrane Interactive Learning self-directed learning modules, a number of which will be required study prior to the workshop.

## Course timetable

Day 1 – 30th January 2025		
Pre-learning: Have completed below modules from Cochrane Interactive Learning Module 1: Introduction to conducting systematic reviews Module 2: Writing the review protocol Module 3: Searching for studies		
10:00	Welcome, introduction of presenters	
10:15	Defining a review question – defining objectives and creating a PICO	
10:45	Practical exercise with PICO development	
11:00	Practical exercise feedback	
11:15	Break	
11:30	Writing a protocol	
12:00	Identifying search terms and searching for relevant studies in a systematic way	
12:30	Practical exercise: developing a search strategy	
12:45	Practical exercise feedback	
13:00	Close	











## Course timetable

Course timetable			
Day 2 - 31st January 2025			
Pre-learning: Have completed below modules from Cochrane Interactive Learning Module 4: Selecting studies and collecting data Module 5: Introduction to study quality and risk of bias			
10:00	Recap and questions on previous workshop		
10:30	Selecting studies		
11:00	Break		
11:15	Practical exercise : assessing eligibility		
11:45	Practical exercise feedback		
12:15	Assessing risk of bias (2.0)		
13:00	Close		

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**Pre-learning:** Have completed below module from Cochrane Interactive Learning **Recap on Module 5:** Introduction to study quality and risk of bias

Recap on Module 5: Introduction to study quality and risk of bias		
10:00	Recap and questions on previous workshop	
10:30	Practical exercise on Risk of bias	
11:00	Break	
11:15	Practical exercise feedback	
11:45	Data extraction and management; different types and formats of outcome data	
12:15	Practical exercise on Data collection/extraction and management	
12:35	Practical exercise feedback & open Q&A	
13:00	Close	











## Course timetable

Day 4 – 5th February 2025		
Pre-learning: Have completed below module from Cochrane Interactive Learning Module 6: Analysing the data		
10:00	Recap and questions on previous workshop	
10:30	Analysis methods for binary data (odds ratio, risk ratio)	
11:00	Analysis methods for continuous data (mean difference, standardised mean difference)	
11:30	Break	
11:45	Introduction to meta-analysis	
12:30	Exploring heterogeneity; subgroup analysis and sensitivity analysis	
13:00	Discussion and questions	
13:30	Close	







