Introduction to Systematic Reviews and Critical Appraisal

Centre for Reviews and Dissemination, University of York

COURSE OUTLINE

November 2024

Module 0: Introduction and orientation

Video 5 mins	Live workshop 120 mins	Discussion board 15 mins	Total estimated learning time
			140 mins

Thursday 14th November, 2024

Pre-module

Video: Introducing the course

Live workshop

10.00 - 12.00 [UK time]

- o Welcome and introduction
- o Orientation to the platforms and technology we will be using
- o Socialisation: meet your tutors and other learners
- o Sharing exercises: what would you like to get out of the course
- o Information about support
- o Introduction to course homework

Post-module

Discussion board:

- o What are your research questions?
- o Any questions, feedback or technical support?

Module 1: Developing the review question and protocols

Live workshop 1 80 mins	Live workshop 2 30 mins	Total estimated learning time
		80 + optional 30 mins

Monday 18th November, 2024

Live workshop 1

9.30 - 10.50 [UK time]

o Presentation: PICOS and review questions

o Group exercises: PICOS and analysing a review question

o Presentation: Review protocols; registering a review protocol

o Question and answer session

Live workshop 2

10.50 - 11.20 [UK time]

- o OPTIONAL review questions clinic
- o Opportunity to discuss your review questions with our experts

Post-module

Resource: Information on registering a review on PROSPERO

- o Any questions, feedback or technical support?
- o Read in your own time

Module 2: Literature searching

Videos 45 mins	Live workshop 60 mins	Total estimated learning time
		105 mins

Tuesday 19th November, 2024

Pre-module

Videos: Introduction to and importance of literature searching

Live workshop

9.30 - 10.30 [UK time]

o Group exercise: search strategy quiz

o Presentation: Beyond Medline – why search extensively?

o Presentation: Take home messages

o Question and answer session

Post-module

Resource: Further learning materials

o MeSH terms, term harvesting; databases; search strategies

o Read in your own time

Module 3: Study selection

	deos mins	L	ive w 120	orks mir	р	Total estimated learning time
						140 mins

Tuesday 19th November, 2024

Pre-module

Videos: Introducing study selection and group exercise

Live workshop

10.50 - 12.50 [UK time]

- o Group exercises: screening based on titles and abstracts
- o Presentation: common issues and tips
- o Question and answer session

Module 4: Data extraction

Videos	Pre-module prep	Live workshop	Total estimated learning time
20 mins	45 mins	90 mins	
			170 mins

Wednesday 20th November, 2024

Pre-module

Videos: Introducing data extraction; Designing and testing a data extraction form

Pre-module Prep:

- o Download and read three papers to prepare for data extraction exercise
- o Download and read example data extraction form

Live workshop

9.30 - 11.00 [UK time]

- o Group exercise: data extraction exercise
- o Follow-up discussion and summary
- o Presentation: Common issues
- o OPTIONAL 'Ask the expert' brief session

Module 5: Critical appraisal of included studies

Videos 75 mins	Pre-module prep 30 mins	Live workshop 60 mins	Total estimated learning time
			165 mins

Thursday 21st November, 2024

Pre-module

Videos: Internal validity, external validity and critical appraisal issues

Pre-module Prep:

- o Read instructions and paper for critical appraisal exercise
- o Discussion board questions or support about paper and instructions

Live workshop

9.30 - 10.30 [UK time]

- o Group exercise: appraise a set of provided vignettes and identify bias
- o Discussion, feedback, Q&A on bias exercise

Module 6: Calculating treatment effects

Videos 15 mins	Live workshop 60 mins	Total estimated learning time
		75 mins

Thursday 21st November, 2024

Pre-module

Video: Introducing treatment effects

Live workshop

11.00 - 12.00 [UK time]

- o Group exercise: calculating effects estimate
- o Discussion, feedback, Q&A

Module 7: Meta-analysis

Videos 140 mins	Pre-module prep 30 mins	Live workshop 120 mins	Total estimated learning time
			290 mins

Friday 22nd November, 2024

Pre-module

Videos:

- o Introduction to meta-analysis
- o Issues in meta-analysis heterogeneity
- o Problems for meta-analysis missing studies, publication bias
- o Why not always do a meta-analysis narrative synthesis

Pre-module Prep:

- o Watch video instructions on downloading R
- o Read instructions for practical exercises
- o Discussion board questions or support about installing software or preparing for exercises

Tuesday 26th November, 2024

Live workshop

9.30 - 11.30 [UK time]

- o Group exercise: R practical exercises
- o 'Ask the expert' clinic follow-up questions from exercise, other questions about meta-analysis

Module 8: Reporting your review

Videos 30 mins	Total estimated learning time
	30 mins

No live session

In your own time learning

Videos:

- o Reporting review findings
- o Writing the discussion
- o Checklists and guidance for reporting your review

Resources:

- o Resources for reporting and writing the discussion
- o Resources on reporting guidelines

Module 9: GRADE

Videos 60 mins	Live workshop 125 mins	Total estimated learning time
		185 mins

Wednesday 27th November, 2024

Pre-module

Videos:

- o Estimate vs. uncertainty of an outcome
- o About GRADE and SoF tables
- o Completing a GRADE assessment
- o Communicating findings
- o Relative vs. absolute risk

Live workshop

9.30 - 11.35 [UK time]

- o Group exercise: GRADEing of a Zinc supplementation review
- o Group exercise: Conclusions based on GRADE assessment
- o Presentation: Completing GRADE assessment
- o 'Ask the expert' clinic follow-up questions from exercise, other questions about GRADE assessment

Module 10: Critical appraisal of a systematic review

Live workshop 90 mins					Total estimated learning time		
							90 mins

Thursday 28th November, 2024

Live workshop

10.00 - 11.30 [UK time]

o Group exercise: What makes a good systematic review

o Group exercise: Using critical appraisal checklists

Module 11: Introduction to health economics

Liv	orkshop mins	Total estimated learning time
		60 mins

Friday 29th November, 2024

Live workshop

9.30 - 10.30 [UK time]

- o Live presentation: Key concepts, challenges and relevance to systematic reviews
- o 'Ask the expert' Q&A and discussion

Module 12: Knowledge mobilisation

Videos 35 mins	Live workshop 60 mins	Total estimated learning time
		95 mins

Friday 29th November, 2024

Pre-module

Videos:

- o The what, why and who of knowledge mobilisation
- o When knowledge mobilisation happens
- o How knowledge mobilisation happens

Pre-module Prep:

Read case study to prepare for practical task

Live workshop

10.50 - 11.50 [UK time]

- o Group exercise: stakeholder mapping
- o Group exercise: Reviewing types of knowledge mobilisation outputs; what does it mean to 'use evidence'?

COURSE CLOSE