Cochrane Workshop: Systematic Reviews of Diagnostic Test Accuracy Studies

Co-organised by Cochrane Sweden and Cochrane Norway Room I1341 BMC, Sölvegatan 19, 223 62 Lund, Sweden

Background

Clinicians, healthcare workers and guideline developers have to take many decisions regarding the application of diagnostic tests. For such decisions to be made, knowledge on the accuracy of tests is necessary. Diagnostic test accuracy (DTA) applies to comparing the results of the test under study (the so-called index test) with those of a reference standard (the best test to identify the patient's condition). In DTA studies, various diagnostic accuracy parameters can be calculated, such as sensitivity, specificity and predictive values. Systematic reviews of DTA evidence have become a helpful tool for medical decision making. Although the principles of these reviews are similar to those of systematic reviews of intervention studies, many aspects of systematic reviews of DTA studies (SRDTAs) require special skills. This does not only apply to the review process itself, but also to meta-analysis of DTA.

This workshop is targeted at people who need to make decisions about diagnostic tests. It forms a coherent basis for systematically reviewing, analysing and interpreting diagnostic evidence.

Objectives

In this two-day workshop participants learn to define the diagnostic 'journey' of a patient with a specific health problem (including the role of tests), to formulate clear diagnostic questions and to identify and appraise DTA studies. Finally, participants will learn how to make their results understandable for end-users. We will follow Cochrane guidance for preparing a Cochrane review of diagnostic test accuracy (see http://dta.cochrane.org/handbook-dta-reviews).

After successful completion of the workshop, participants will:

- 1. know the various steps involved in conducting an SRDTA;
- 2. be able to write a protocol for an SRDTA, including a description of the clinical pathway;
- 3. be able to frame the study question and define criteria for inclusion and exclusion of studies;
- 4. understand the principles of conducting sensitive search strategies for DTA studies;
- 5. be able to assess the methodological quality of DTA studies by the use of QUADAS-2;
- 6. understand the principles of meta-analysis of diagnostic test accuracy;
- 7. be able to interpret and present the results.







Target audience

The workshop is directed to review authors, healthcare workers, clinicians, researchers (statisticians and epidemiologists), guideline developers and policymakers, who wish to know more about systematically reviewing and understanding diagnostic evidence.

Prerequisites

- Basic knowledge of the methodology and statistical analysis of primary studies of diagnostic test accuracy.
- Familiarity with the methodology and conduct of systematic reviews.

Topics

- Introduction to diagnostic studies.
- Developing a protocol for a systematic review of DTA.
- Framing the study question, defining the title, objectives and criteria for inclusion of studies.
- Introduction to study identification.
- Assessment of methodological quality (QUADAS-2).
- Data extraction.
- Principles of diagnostic meta-analysis.
- Making the results understandable for non-experienced end-users.

Workshop Style

The workshop will consist of interactive, plenary presentations with ample room for discussion, small group exercises and computer exercises. Participants are asked to do some preparatory work before the workshop and to do some self-study during the workshop. Participants are asked to bring their own laptop.

Faculty

- Lotty Hooft, PhD, Associate Professor, Director, Cochrane Netherlands at the Julius Center, UMCU, Utrecht.
- Rob Scholten, MD, PhD, Cochrane Netherlands at the Julius Center, UMCU, Utrecht.
- Pauline Heus, MSc, Cochrane Netherlands at the Julius Center, UMCU, Utrecht.
- Matteo Bruschettini, Associate Professor, Director, Cochrane Sweden
- Claire Glenton, Director, Cochrane Norway

Language

English







Dates, insurance & cancellation

Lund, Sweden – 21-22 January, 2020

NB: A minimum number of participants is required for this course. We will decide if the course will go ahead six weeks before the start of the course. Participants from abroad should take account of this when making travel arrangements.

A full refund will be available if you notify us by email up to 30 working days before the date of the event. Refunds are not available if you cancel your place within 30 working days before the date of the event. The organization does not accept liability for individual medical, travel or personal insurance. Participants are strongly advised to take out their own personal insurance policies. In case an unforeseen event would force the organization to cancel the meeting, the organization will fully reimburse the participants registration fees, but will not be responsible for the refund of travel and accommodation costs.

Course fee

3800 SEK (approximately 400 euros)

Online application

Register online for the course

For more information on the content of the course

Send an e-mail with your question(s) to the contacts on https://sweden.cochrane.org/contact-us





