



## Cochrane Workshop

# Systematic reviews of diagnostic studies

June 25 and 26, 2018 – Vienna - Austria

# Systematic reviews of diagnostic studies

## **Background**

Clinicians, healthcare workers and guideline developers have to take many decisions regarding the application of diagnostic tests. For such decisions knowledge of 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). From this various diagnostic accuracy parameters can be derived, such as sensitivity, specificity and predictive values. To help making diagnostic decisions systematically summarising DTA evidence has become a major part of medical decision making. Although the principles of systematically summarising diagnostic evidence are similar to those of systematic reviews of interventions, many aspects of systematic reviews of DTA (SRDTAs) require special skills. This not only applies to the systematic review process itself, but also to meta-analysis of DTA. This workshop is targeted at people who need to make decisions about diagnostic tests and forms a coherent basis for systematically reviewing and interpreting diagnostic evidence.

## **Objectives**

In this two-day workshop participants learn to define the diagnostic 'journey' of a patient with a particular health problem (including the role of tests), to formulate clear diagnostic questions and to identify and appraise DTA studies. They will be introduced into the principles of meta-analysis, so that they are able to understand and interpret diagnostic meta-analysis. We will follow Cochrane guidance for preparing a Cochrane systematic 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 frame the study question and define criteria for inclusion and exclusion of studies;
3. know the various steps involved in searching for DTA studies;
4. be able to assess the methodological quality of DTA studies by the use of QUADAS-2;
5. understand the principles of DTA meta-analysis;
6. know how to apply GRADE (grading of certainty of evidence) in SRDTA
7. be able to interpret and present the results.

## **Target audience**

The workshop is directed to review authors, healthcare workers, clinicians, researchers, guideline developers and policy makers, who wish to know more about systematically reviewing and understanding diagnostic evidence.

## **Prerequisites**

1. Basic knowledge of the methodology and statistical analysis of primary studies of diagnostic test accuracy.
2. 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
- Practical introduction to diagnostic meta-analysis
- Using GRADE for DTA
- Making the results understandable for non-experienced end-users

## **Workshop Style**

The workshop will consist of interactive, plenary presentations with ample room for discussion, and small group exercises.

## **Faculty**

- Lotty Hooft, PhD, Cochrane Netherlands and Julius Center, Utrecht.
- Rob Scholten, MD, PhD, Cochrane Netherlands and Julius Center, Utrecht.
- Gerald Gartlehner, MD, MPH, Cochrane Austria

Facilitators are members of the Cochrane Screening and Diagnostic Test Methods Group and/or Cochrane Diagnostic Test Accuracy Editorial Team and GRADE working group.

## **Language**

English

## **Dates, insurance & cancellation**

Vienna – June 25 and 26, 2018

NB: For this course a minimum number of participants is required. On June 3rd 2018 we will decide whether the course will go ahead. Participants from abroad should take account of this when making travel arrangements. In case the course will be cancelled due too little participation, the organisation will fully reimburse the participants registration fees, but will not be responsible for the refund of travel and accommodation costs

A cancellation of the registration is possible up to one week before the beginning of the event. In this case, a cancellation fee of 20% of the participation fee will be charged. After this time, no cancellation is possible. The organisation 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 organisation to cancel the meeting, the organisation will fully reimburse the participants registration fees, but will not be responsible for the refund of travel and accommodation costs.

## **Course fees**

Two day workshop: € 590,-

**Online application**

To enrol to this workshop please send an e-mail to [office@cochrane.at](mailto:office@cochrane.at).

**For more information on the content of the course**

Send an e-mail with your question(s) to [office@cochrane.at](mailto:office@cochrane.at)

Cochrane Austria

Danube University Krems

Dr. Karl Dorrek-Strasse 30

3500 Krems a.d. Donau

AUSTRIA

P: +43 (0)2732-893-2916

E: [office@cochrane.at](mailto:office@cochrane.at)

W: [www.cochrane.at](http://www.cochrane.at)

**For organisational information**

For organisational information, e.g. about location, invoicing etc. you can contact the course organiser at Cochrane Austria, at [office@cochrane.at](mailto:office@cochrane.at).

Cochrane Austria  
Danube University Krems

Postaddress  
Dr. Karl Dorrek-Str. 30  
3500 Krems a.d. Donau

Tel +43 (0)2732-893-2916  
office@cochrane.at  
www.cochrane.at