

Core skills 1

# Using Literature to inform my practice



## **General Information**

#### **Chair of Education Committee**

Yu-Mi Ryang, MD PhD

#### **Rehabilitation Council Chair**

Johan Van Lerbeirghe

#### **Chair, EDISC Committee**

Pierre Côté, DC PhD

#### **EDISC Module 1 Chair**

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# **Quick Facts**

LIVE SESSION DATE & TIME	23 January 2026 from 13:00 – 17:30 CET (Central European Time)
VENUE	Virtual (live)
MAX. ATTENDEES	40 participants
REGISTRATION FEE	EUROSPINE Member: €100 Non-member: €150
CME CREDITS	Two CME certificates are awarded for this module, one for the elearning component and one for the live session.
****	Accreditation by the European Board for Accreditation of Continuing Education for Health Professionals (EBAC) is pending
LANGUAGE	English
DRESS CODE	Smart casual. You will be interacting with fellow participants on video and will be seen on camera.
E-LEARNING	<ul> <li>The e-learning component contains video lectures and quizzes. Completion is required before the live session.</li> <li>A minimum score of 70% must be achieved.</li> <li>Access will be provided 4 weeks before the live session.</li> </ul>
MODULE COMPLETION	<ul> <li>Module completion is achieved when ALL the following are met:</li> <li>E-learning is passed with a minimum score of 70% AND</li> <li>Attendance of ≥ 90% of the live session time AND</li> <li>Completion of the CME evaluation and feedback surveys for both components</li> </ul>
TARGET AUDIENCE	Spine care professionals (non-surgical and surgical): primary care physicians and surgeons involved in spine care, physiotherapists, chiropractors, osteopaths, occupational therapists, clinical psychologists, nursing practitioners, naprapaths and others who have graduated as clinicians from a recognized institution (i.e. professional school or university).
IMPORTANT (!)	<ul> <li>A computer (Mac/PC) or tablet (Android/Mac) and stable internet connection are required to access the e-learning content and virtual live session. The course evaluation is mandatory to obtain the CME certificate.</li> <li>This module has 1 virtual live session and attendance is mandatory.</li> <li>Please log in to the Zoom session 10 minutes before live session starts</li> </ul>



# **E-Learning Programme**

The e-learning component must be completed by the start of the live session. Attendees are encouraged to engage with any other preparatory material i.e. readings, before a live session and actively participate in discussions and group work during the live session.

Time Duration	Торіс	Faculty		
Session 1: Introduction				
00:32	Introduction to critical appraisal: evidence-based spinal care and critical appraisal	Jessica Wong		
00:20	Knowledge check questions			
Session 2: Randomised controlled trials				
00:25	Critical appraisal of a randomized controlled trial: the fundamentals	Josh Plener		
00:20	Knowledge check questions			
Session 3: Cohort studies				
00:32	Critical appraisal of a cohort study: the fundamentals	Jessica Wong		
00:20	Knowledge check questions			
Session 4: Systematic reviews				
00:21	Critical appraisal of a systematic reviews: the fundamentals	Jessica Wong		
00:20	Knowledge check questions			

# **Virtual Live Sessions Programme**

### FRIDAY, 23 JANUARY 2026, 13:00-17:30 CET

Time	Topic	Faculty		
13:00 – 13:10	Welcome and introduction	Jessica Wong		
13:10 – 13:30	Lecture 1: Presentation of clinical case and discussion on treatment options in the context of evidence-based care	Pedro dos Santos Silva		
Randomised controlled trials				
13:30 –14:30	Workshop 1: Critical appraisal of parts of a randomised controlled trial (article and appraisal form, related to method and case)	Josh Plener		
Break 14:30 – 14:40 (10 mins)				



Cohort studies				
14:40 – 15:25	Lecture 2: Critical appraisal of parts of a cohort study (article and appraisal form, related to method and case)	Jessica Wong		
Break 15:25 – 15:35 (10 mins)				
Systematic reviews				
15:35 – 16:30	Workshop 2: Critical appraisal of parts of a systematic review (article and appraisal form, related to method and case)	Jessica Wong		
Break 16:30 – 16:40 (10 mins)				
16:40 – 17:15	Lecture 3: Applicability of study results to initial clinical case, discussion, and feedback	Pedro Silva		
17:15 –17:30	Wrap up and closing remarks	All Faculty		
End of module				

## Aims of the Module

This course will provide participants with the necessary skills to critically appraise the quality of the spine literature. Specifically, the course will introduce basic study designs and discuss the main threats to the validity of clinical studies.

Learning methods include lectures and workshops. Recently published papers will be used for discussion in the workshops. The topics covered in the course include: the importance of critically reading the literature to inform clinical practice, and emphasis will be on the evaluation of randomized clinical trials, cohort studies, and systematic reviews.

Participants will learn to use a critical appraisal tool to assess the quality of randomized control trials, cohort/prognostic studies, and systematic reviews.



# **Learning Outcomes**

By the end of the e-learning and live session, learners should be able to:

#### **General learning outcomes**

- Understand how critical appraisal can improve clinical practice by integrating evidence and patients' perspectives;
- Understand the basic design of a randomized controlled trial, cohort study, and systematic review;
- Evaluate the quality of randomized clinical trials, cohort studies, and systematic reviews;

#### Randomized clinical trials:

- Critically appraise a randomized clinical trial using a standardized critical appraisal tool and identify the main threats to its validity;
- Discuss the validity of a randomized clinical trial and relevance of results to clinical practice;

#### **Cohort/prognostic studies:**

- Critically appraise a cohort/prognostic study using a standardized critical appraisal tool and identify the main threats to its validity;
- Discuss the validity of a cohort/prognostic study and relevance of results to clinical practice;

#### **Systematic reviews:**

- Critically appraise a systematic review using a standardized critical appraisal tool and identify the main threats to its validity;
- Discuss the validity of a systematic review and relevance of results to clinical practice.

# **Instructional Methods**

The following instructional methods will be employed in the teaching of this module:

- Pre-learning activities: Preparatory readings;
- Classroom teaching: Interactive lectures that extend from theory to case-studies;
- Workshops: Facilitated group discussions and practical workshops.

All instructional methods should require active participation, consistent with the range of motivations for pursuing the EDISC programme. There should also be a strong emphasis on self-directed learning and pre-reading.



# **E-Learning**

Introduction to critical appraisal

• Lecture: This session will introduce learners to the importance of critically reading the clinical literature and introduce the basic principles necessary to evaluate the quality of randomized controlled trials (RCTs), cohort studies, and systematic reviews.

Critical appraisal of RCTs – the fundamentals: What clinicians need to know to determine the quality of an RCT.

- Lecture: The session will provide basic knowledge of the methodological design of RCTs
- Activity: The instructor will facilitate the evaluation of an RCT with the class by using a critical appraisal tool

Critical appraisal of cohort/prognostic studies – the fundamentals: What clinicians need to know to determine the quality of a cohort/prognostic study.

- Lecture: The session will provide basic knowledge of the methodological design of a cohort/prognostic study.
- Activity: The instructor will facilitate the evaluation of a cohort/prognostic study with the class by using a critical appraisal tool.

Critical appraisal of systematic reviews – the fundamentals: What clinicians need to know to determine the quality of a systematic review.

- Lecture: The session will provide basic knowledge of the methodological design of a systematic review.
- Activity: The instructor will facilitate the evaluation of a systematic review with the class by using a critical appraisal tool.

## **Virtual Live Session**

Workshop 1: Critical appraisal of an RCT

Activity: In small groups, learners will work together to evaluate the quality of an RCT using the Centre for Evidence-based Medicine (CEBM) Randomized Controlled Trial Checklist. The instructors will serve as methodological experts to guide the small group interactions. The critical appraisal session will be followed by a consensus discussion that will involve all learners.

Lecture 2: Critical appraisal of a systematic review

 As a large group, learners will discuss the evaluation of systematic review using the Centre for Evidence-based Medicine (CEBM) Systematic Review Checklist. The instructors will serve as methodological experts to guide the discussion that will involve all learners.

Workshop 2: Critical appraisal of a cohort/prognostic study

 Activity: In small groups, learners will work together to evaluate a cohort/prognostic study using the Centre for Evidence-based Medicine (CEBM) Cohort Study Checklist.
 The instructors will serve as methodological experts to guide the small group



interactions. The critical appraisal session will be followed by a consensus discussion that will involve all learners.

# **Assignments**

#### **PART 1 E-learning**

 Participants are required to complete the e-learning component and pass with a minimum score of 70%.

#### **PART 2 Live session**

- Participants will be provided with three articles, reporting an RCT, a cohort study, and a systematic review; they will have to fill the corresponding checklist from Centre for Evidence-based Medicine (CEBM). Model abstracts will be provided shortly after the deadline for submission. Participants are then encouraged to self-evaluate.
- Participants will be required to complete the module feedback, which includes questions for self-reflection.

## **CME Module Evaluation**

In line with EBACs requirements for accredited activities, participants will be requested to complete a mandatory evaluation at the end of the module in the form of a short online survey. Responding to the survey is a condition in order for participants to obtain their CME certificates.

# **List of Resources**

#### **Mandatory Readings**

- Centre for Evidence-based Medicine Critical Appraisal Tool for Randomized Controlled Trial – Therapy Study. Download available at: <a href="https://www.cebm.ox.ac.uk/resources/ebm-tools/critical-appraisal-tools">https://www.cebm.ox.ac.uk/resources/ebm-tools/critical-appraisal-tools</a>
- Centre for Evidence-based Medicine Critical Appraisal Tool for Prognostic Study.
   Download available at: <a href="https://www.cebm.ox.ac.uk/resources/ebm-tools/critical-appraisal-tools">https://www.cebm.ox.ac.uk/resources/ebm-tools/critical-appraisal-tools</a>
- Centre for Evidence-based Medicine Critical Appraisal Tool for Systematic Review.
   Download available at: <a href="https://www.cebm.ox.ac.uk/resources/ebm-tools/critical-appraisal-tools">https://www.cebm.ox.ac.uk/resources/ebm-tools/critical-appraisal-tools</a>

#### **Recommended Readings**

- McCulloch P, Altman DG, Campbell WB, Flum DR, Glasziou P, Marshall JC, Nicholl J, the Balliol Collaboration. No surgical innovation without evaluation: the IDEAL recommendations. Lancet. 2009(374):1105-112.
- Greenhalgh T. Of lamp posts, keys, and fabled drunkards: A perspectival tale of 4 guidelines. J Eval Clin Pract. 2018;24(5):1132-8. DOI: 10.1111/jep.12974.