

EDUCATION / EURO
SPINE

EUROSPINE Diploma in Interprofessional Spine Care

EDISC COURSE 2024

Module 1: Using literature to inform my
practice - core skills 1

General Information

EUROSPINE, the Spine Society of Europe
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Eva Skillgate, Dr Napr PhD, Epidemiologist, SE

Module Faculty

Pierre Côté, DC PhD, Epidemiologist, CA

Everard Munting, MD PhD, Spine Surgeon, BE

Jessica Wong, DC PhD, Epidemiologist, CA

Quick Facts

LIVE SESSION DATE & TIME	19 January 2024 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 e-learning 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 style="list-style-type: none"> • The e-learning component contains video lectures and quizzes. Completion is required before the live session. • A minimum score of 70% must be achieved. • Access will be provided 4 weeks before the live session.
MODULE COMPLETION	<p>Module completion is achieved when ALL the following are met:</p> <ul style="list-style-type: none"> • E-learning is passed with a minimum score of 70% AND • Attendance of ≥ 90% of the live session time AND • Completion of the CME evaluation and feedback surveys for both components
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 are graduated as clinicians from a recognized institution (i.e. professional school or university).
IMPORTANT (!)	<ul style="list-style-type: none"> • A computer (Mac/PC) or tablet (Android/Mac) and stable internet connection are required to access the e-learning content and virtual live sessions. <u>The course evaluation is mandatory to obtain the CME certificate.</u> • This module has 1 virtual live session and attendance is mandatory. • Please log in to the Zoom session 10 minutes before live session start

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 live sessions.

Time Duration	Topic	Faculty
Introduction		
01:08	Introduction to critical appraisal: evidence-based spinal care and critical appraisal	Eva Skillgate
00:20	Knowledge check questions	
Randomised control trials		
00:30	The architecture of RCTs (1/5)	Eva Skillgate
00:26	The architecture of RCTs (2/5)	Eva Skillgate
00:19	The architecture of RCTs (3/5)	Eva Skillgate
00:10	The architecture of RCTs (4/5)	Eva Skillgate
00:12	The architecture of RCTs (5/5)	Eva Skillgate
00:20	Knowledge check questions	
00:48	Critical appraisal of a cohort study: the fundamentals	Pierre Côté
00:20	Knowledge check questions	

Virtual Live Sessions Programme

FRIDAY, 19 JANUARY 2024, 13:00-17:30 CET

Time	Topic	Faculty
13:00 – 13:10	Welcome and introduction	Eva Skillgate
13:10 – 13:30	Workshop 1: Presenting clinical cases and polling participants with their treatment recommendation	Everard Munting
13:30 – 13:50	Workshop 2: Systematic Literature Review	Jessica Wong
Randomised controlled trials		
13:50 – 15:10	Workshop 3: Critical appraisal of parts of a randomised controlled trial (article 1, related to cases)	Eva Skillgate
Break 14:55 – 15:10 (15 mins)		

Cohort and prognostic studies		
15:10 – 16:30	Workshop 4: Critical appraisal of parts of a cohort study (article 2, related to cases)	Pierre Côté
Break 16:30 – 16:45 (15 mins)		
16:45 – 17:15	Workshop 5: applicability of study results to initial cases, polling of students, and feedback	Everard Munting
17:15 – 17:30	Wrap up, closing remarks	Eva Skillgate
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 out on the evaluation of randomized clinical trials and cohort studies.

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

Learning Outcomes

This module aims to enable learners to:

General outcomes and objectives

- Evaluate the quality of randomized clinical trials (RCTs);
- Evaluate the quality of cohort/prognostic studies;
- Understand how critical appraisal can improve clinical practice by integrating evidence and patients' perspectives;
- Judge whether to change their practice based on new evidence.

Outcomes and objectives for session 1: Introduction to critical appraisal

- Understand how critical appraisal can improve clinical practice by integrating evidence and patients' perspectives;
- Identify the research question(s) and study objective in a published article;
- Understand the notions of statistical significance and clinical importance of study results;
- Judge when to change their practice based on new evidence.

Outcomes and objectives for session 2: The architecture of RCTs: What clinicians need to know to determine the quality of a RCT

- Understand the basic design of a RCT;
- Understand key issues to consider when critically appraising a randomised controlled trial: selection issues, randomisation, measurement of key outcomes, comparability of groups, data analysis.

Outcomes and objectives for session 3: The architecture of cohort/prognostic studies: What clinicians need to know to determine the quality of a cohort/prognostic study

- Understand the basic structure of cohort/prognostic studies;
- Understand the role of data registry in the conduct of cohort/prognostic studies;
- Understand key issues to consider when critically appraising a cohort/prognostic study: selection of participants, measurement of exposures and outcomes, control for confounders and interpretation of results.

Outcomes and objectives for Workshop 1: Critical appraisal of a RCT

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

Outcomes and objectives for Workshop 2: Critical appraisal of a cohort/prognostic study

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

The architecture of RCTs: What clinicians need to know to determine the quality of a RCT.

- Lecture: The session will provide basic knowledge of the methodological design of RCTs

- Activity: The instructor will facilitate the evaluation of a RCT with the class by using a critical appraisal tool

The architecture of cohort/prognostic studies: 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.

Virtual Live Session

Workshop 1 & 2: Critical appraisal of a RCT

- Activity: In small groups, learners will work together to evaluate the quality of a RCT using the CASP 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.

Workshop 3 & 4: Critical appraisal of a cohort and prognostic study

- Activity: In small groups, learners will work together to evaluate a cohort/prognostic study using the JBI tool. 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 two articles, reporting a RCT and a cohort study; they will have to fill the corresponding grid (either CASP or 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

- 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.
- 11 questions to help you make sense of a trial from Critical Appraisal Skills Programme. Oxford UK. Download available at: <https://casp-uk.net/casp-tools-checklists/>.

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.
- 12 questions to help you make sense of cohort study. Downloaded from Critical Appraisal Skills Programme. Oxford UK. Download available at: <https://casp-uk.net/casp-tools-checklists/>
- CHECKLIST FOR COHORT STUDIES Critical Appraisal tools for use in JBI Systematic Reviews. Download available at: <https://jbi.global/sites/default/files/2020-10/Checklist for Cohort Studies.pdf>.