Human Factors in Healthcare 2026

COURSE OVERVIEW

This 3-day course will discuss the role of Human Factors in Healthcare across a variety of application areas, including safety and quality improvement, procurement, process evolution, and capital planning. Participants will have opportunities for the application of Human Factors knowledge and methods through course projects in seven course modules covering case studies and methodologies in various relevant clinical areas.

COURSE OBJECTIVES

At the end of this course, participants will be able to:

- Understand and describe the applicability of Human Factors in healthcare
- Recognize when Human Factors considerations or involvement is applicable in your work
- Meaningfully involve end users to enhance quality improvement and patient safety

WHO SHOULD ATTEND?

Physicians, nurses, allied health care professionals, health professions learners, hospital administrators, and health systems managers.

STUDY CREDITS

This activity is an Accredited Self-Assessment Program (Section 3) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada and approved by the University of Calgary Office of Continuing Medical Education and Professional Development. You may claim a maximum of 21 hours (sevens hours for each day) – credits are automatically calculated.

REGISTRATION FEE

- $750 plus 5% GST
  (Early bird rate on or before January 19, 2026)
- $900 plus 5% GST (Registration deadline February 23, 2026 for Calgary and March 9, 2026 for Edmonton)

PLANNING COMMITTEE

Ward Flemons, MD FRCPC, Quality & Safety Education Lead, Chair; Jonas Shultz, Human Factors Specialist, Adjunct Lecturer, HQA*; Katelyn Wiley, Human Factors Specialist, AHS*; Susan Biesbroek, Human Factors Specialist, AHS*; Jill de Grood, MA PMP, Director, Development & Partnerships W21C; Jamie Kaufman, Director, W21C; Jason Laberge, Director Human Factors and Evaluation, AHS; Alex Baron, Communication Advisor, W21C; Amber Kalyn, Senior Advisor Communications, HQA; Alisa Eaton, Senior Analyst Finance, HQA; and Jennifer Badock, HQA.

DISCLOSURE OF POTENTIAL FINANCIAL CONFLICTS OF INTEREST

In keeping with accreditation guidelines, speakers participating in this event have been asked to disclose to the audience any involvement with industry or other organizations that may potentially influence the presentation of the educational material. Disclosure will be done verbally and using a slide prior to the speaker's presentation.

QUESTIONS?

Please contact Jonas.Shultz@hqa.ca or visit our website for more information: hqa.ca/HFcourse

*Denotes course faculty and instructors.

Calgary course – register here

March 2 to March 4, 2026, from 8:30 a.m. to 4 p.m. MDT

Edmonton course – register here

March 17 to March 19, 2026, from 8:30 a.m. to 4 p.m. MDT

MODULES & LEARNING OBJECTIVES

Module 1

Introduction to Human Factors in Healthcare
(1.5 hours)

1. Define Human Factors and its role in healthcare as an applied discipline for healthcare improvement
2. Highlight various Human Factors evaluation methodologies
3. Identify relevant and reliable sources of information to engage in self-directed learning about Human Factors in healthcare

Module 2

Human Error and Cognitive Biases
(2 hours)

1. List and describe different types of cognitive errors
2. Differentiate between the person and system approach to error reduction
3. Identify various error reduction strategies

Module 3

Human Factors in the Design and Evaluation of Icons, Symbols, and Labels
(3.5 hours)

1. Evaluate the design of generic labels, symbols, and icons in health care documentation applying knowledge of task analysis and heuristic evaluation
2. Define objective performance metrics to evaluate the effectiveness of labels, symbols, and icons
3. Discuss the potential risks of poorly designed labels, symbols, and icons

Module 4

Human Factors in the Design and Evaluation of Digital Interfaces
(3.5 hours)

1. Define principles commonly utilized during a heuristic evaluation
2. Develop a usability test plan for an assessment of digital interfaces
3. Define reporting requirements for the evaluation of a digital user interface
4. Calculate aggregate performance metrics from usability test data

Module 5

Human Factors in Procurement
(3.5 hours)

1. Describe the steps to conduct a task analysis for a 'simple' system
2. Analyze the strengths and limitations of common Human Factors methods for the purposes of procurement activities
3. Define information requirements [context of use] to be included to set up a usability test
4. Describe how Human Factors evaluation methodologies can be incorporated into procurement activities

Module 6

Human Factors in the Design and Evaluation of Environments
(3.5 hours)

1. List multiple human factors methodologies relevant to planning for the evaluation of a process
2. Differentiate between design-focused and human-focused solutions to process and implantation problems
3. Consider the interaction of system elements within a complex environment and the impact those interactions have on process outcomes
4. Discuss various observational methods and how they can be used to study and optimize processes

Module 7

Human Factors in Process Evaluation
(3.5 hours)

1. Define the resource requirements for mock-up and post-occupancy evaluations of built environments
2. Describe how observed behaviours and user feedback can be used for the assessment of built environments
3. Outline and discuss how to translate evaluation findings into recommendations to improve the effectiveness of built environments