



HEALTH Economics

APPLYING HEALTH ECONOMICS TOOLS & TECHNIQUES

This 13 week programme aims to give you the skills to analyse and evaluate typical resource allocation problems involving health and healthcare. It provides you with an analytical toolkit and evidence base to help you better understand the efficiency and equity implications of these key resource allocation decisions.



BENEFITS

This Health Economics Course offers a number of benefits for you and your organisation.

For your Organisation:

- ✓ Realise your organisation true potential by empowering your team to make positive changes in the decision making process
- ✓ The training and development of an in-house resource, to aid in interpreting policies and analysing trade-offs in healthcare decision making
- ✓ New approaches to problem solving
- ✓ Better understanding of the implications of key resource allocation decisions.

For you:

- ✓ Develops sought after skills in Health Economic Evaluation
- ✓ Develops capability to understand and communicate the value for money, affordability and uncertainty of competing options
- ✓ Increases graduates earning potential
- ✓ Mentor support by Health Economist academics
- ✓ Access to a peer network
- ✓ Certified by the University of Ontario

PROGRAMME OVERVIEW

This online course introduces you to the discipline of Health Economics and the practical tools and techniques.

The course will cover the following key topics:

- ✓ Key concepts in Health Economics and Health Economic evaluation
- ✓ Application of Health Economics to decision making, project evaluation and value communication within Healthcare organisations
- ✓ Applied methods of economic evaluation
- ✓ Modeling potential scenarios and budget impact



LEARNING OUTCOMES

Upon completion, participants will have the confidence, knowledge and skills to:

- ✓ Find, assess and interpret Health Economic evidence
- ✓ Identify key steps in modelling project scenarios in order to aid decision making
- ✓ Explain the key steps in planning economic evaluations of projects to calculate Return on Investment

WHO SHOULD ENROLL?

Healthcare professionals, practitioners and administrators who wish to learn how to understand and apply health economics to improve decision making, project evaluation, policy analysis and value communication. In particular, those working in:

- ✓ Finance/administration/commissioning in healthcare organisations/networks
- ✓ Healthcare policy and advocacy
- ✓ Medical devices and pharmaceutical sectors
- ✓ Healthcare research and evaluation

COURSE LEADERSHIP AND MENTORING

Matthew HAMILTON – Course Director,
MSc. in Health Economics

Michelle QUEALLY – Health Economics
Mentor, PHD in Health Economics

Lucrecia CRUZ – Health Economics
Support, (MBBS)



PROGRAMME ASSESSMENT

Assessment of this course is comprised of two components:

- ✓ **Multiple Choice Online Exam**
 - The final exam is worth 40% of total marks.
- ✓ **Course Assignment**
 - The Course Assignment is worth 60% of total marks.

To be certified for this course you must achieve a passing grade overall (50% of total marks) as well as a passing grade (50% of marks available for each component) in both components (i.e. achieve a minimum of 20 out of the 40 total marks from the Multiple Choice Online Exam and 30 out of the 60 total marks from the Course Assignment).

PROGRAMME CERTIFICATION

Successful participants are awarded a certificate of completion with international certification.



The University of Ontario, Institute of Technology (UOIT) advances the discovery and application of knowledge through a technology enriched learning environment and innovative programmes responsive to the needs of students and the evolving 21st century workplace. With

over 9,800 undergraduate and graduate students enrolled across 75 programmes, delivered by exceptional faculty, UOIT promotes social engagement, fosters critical thinking and integrates outcomes-based learning experiences inside and outside the classroom.

CONTACT & REGISTRATION

For more information or to register please visit our website or e-mail us.

 <http://leigroup.com.au/>
 E-mail: info@leigroup.com.au

We will respond to your enquiry as swiftly as possible.

PROGRAMME OUTLINE

Module 1: Introduction to Health Economics and Economic Evaluation

Module 1 is comprised of three units

Unit 1 – Introduction to Health Economics will give you an initial outline of:

- ✓ The purpose, scope and core concepts of Health Economics
- ✓ Some of the skills that Health Economists should have
- ✓ The type of decision problems and research questions that Health Economics can help with

Unit 2 – Health Economic evaluation introduces you to:

- ✓ The sub-discipline of Health Economic evaluation (the key focus of this course)
- ✓ The rationale for economic evaluation and its role in healthcare decision making
- ✓ The sources of nation specific guidance on how to conduct economic evaluations

Unit 3 – Applying Health Economics in your organisation provides you with:

- ✓ Guidance on framing decision problems that are appropriate to analyse with Health Economic evaluation techniques



Module 2: Core Concepts in Health Economic Evaluation

Module 2 is comprised of four units. It introduces more detailed information about key aspects of economic evaluations of healthcare projects: costs, benefits, the synthesis of costs and benefits and uncertainty.

Unit 1 – Analysis of costs will:

- ✓ Examine both direct and indirect costs
- ✓ Introduce the concept of perspective
- ✓ Identify what costs to include and exclude
- ✓ Separate costs into their resource use and unit price components
- ✓ Introduce time preferences and discounting
- ✓ Outline how to convert between price years and currencies

Unit 2 – Analysis of benefits will:

- ✓ Consider intermediate and final outcomes
- ✓ Discuss condition-specific, generic health and health preference benefit measures
- ✓ Introduce the QALY and the DALY
- ✓ Outline how the standard gamble, time trade-off and visual analogue scale methods can be used to value health preferences

Unit 3 – The synthesis of costs and benefits will:

- ✓ Distinguish between partial and full economic evaluations
- ✓ Describe two types of partial economic evaluations – cost-consequence analysis and cost minimisation analysis
- ✓ Describe the three types of full Health Economic evaluations – cost-benefit analysis, cost effectiveness analysis and cost-utility analysis
- ✓ Introduce the concepts of dominance, incremental cost-effectiveness, net-benefit and willingness to pay
- ✓ Outline preference elicitation techniques for deriving willingness to pay values
- ✓ Discuss selected national and international benchmark values for the thresholds at which healthcare projects can be considered cost-effective
- ✓ Demonstrate a graphical technique for representing a number of these concepts – the cost effectiveness plane

Unit 4 – Uncertainty will:

- ✓ Describe the different types of uncertainty that Health Economists must contend with
- ✓ Introduce some statistical representations of uncertainty
- ✓ Discuss deterministic and probabilistic approaches to addressing some aspects of uncertainty
- ✓ Demonstrate a graphical technique for representing the uncertainty about cost effectiveness results – the cost-effectiveness acceptability curve

Module 3: Introduction to Health Economic Evaluation Methods

The four units of Module 3 introduce a number of the methods that will enable you to apply the concepts discussed in Module 2 to address specific decision / evaluation problems in your organisation.

Unit 1 – Accessing and assessing published evidence focuses on:

- ✓ Techniques relating to searching for relevant Health Economic evaluation evidence
- ✓ Critically appraising this evidence for quality, relevance and transferability

Unit 2 – Experimental and observational designs:

- ✓ Provides an overview of observational/trial based approaches to economic evaluations
- ✓ Identifies a number of specific issues to bear in mind if considering integrating economic analysis with clinical/operational research projects

Unit 3 – Decision analytic models:

- ✓ Outlines the rationale for developing models
- ✓ Identifies key good practice principle
- ✓ Describes the key steps in building a decision tree model

Unit 4 – Preference elicitation:

- ✓ Outlines the rationale for measuring preferences
- ✓ Distinguishes between revealed and stated preference techniques
- ✓ Provides an introductory overview of key aspects to the discrete choice experiment stated preference technique

Module 4: Simulations and Budget Impact

The two units of Module 4 address the issues of process efficiency and affordability.

Unit 1 – Discrete event simulations will give you an overview of:

- ✓ Key aspects of discrete event simulations
- ✓ Potential applications of discrete event simulations within healthcare organisations
- ✓ Pros and cons for the use of discrete event simulations

Unit 2 – Budget impact analysis will outline:

- ✓ Key aspects of budget impact analyses – a method to supplement information about cost-effectiveness with an analysis of project affordability



<http://leigroup.com.au/>
E-mail: info@leigroup.com.au