CELforPharma
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ONLINE SELF-STUDY PROGRAMME

Basics of Health Economics

Understand a brand's cost-effectiveness, what payers expect, and the need for evidence generation along the product lifecycle

The Expert: Prof. Dr. Lieven Annemans

- Prof. Dr. Lieven Annemans has participated in more than 400 health economic evaluations in over 20 countries across a wide spectrum of therapeutic areas. He has also been involved as an expert in a large number of Health Technology Assessments (HTAs) and is actively involved in HTA on a European level.
- A unique profile: academic professor, past-president of ISPOR, advisor to policy makers, trainer and consultant.
- Highly respected for his vast international and cross-therapeutic experience, Lieven is a much sought-after advisor and educator to health policy makers and the innovative healthcare industry.
- Author of *Health economics for non-economists* (Pelckmans Pro, 2018).

Learn:

1. The full meaning of QALYs and ICERs, two key measures in cost-effectiveness studies, and how to calculate them.
2. The challenges with the QALY, especially in particular diseases, and how these can be addressed.
3. How payers in different countries apply ICER thresholds that are used to select candidates for reimbursement.
4. The logic and maths of commonly used models that health economists use to simulate treatment outcomes and to predict and compare the cost-effectiveness of different treatments.
5. The basic principles of a budget impact analysis, which also considers the perspective of the payer's budget and the choices that have to be made across patient populations.
6. How health economic insights can add tremendous value to pharma/medtech products throughout their entire lifecycle, from early clinical development up to post-launch.

Additional Benefits:

7 The supporting training materials (i.e. workbook, exercises, slide printouts and additional readings) will optimise learning retention.

8 Track your progress from the pre-course motivational self-assessment exercise, through the exercises in the modules to the final test and benchmark your results with the industry average during the Kick-off and Closing Webinar.

Agenda:

I. KICK-OFF WEBINAR (~ 1 h)

You will meet the other participants and your Learning Coach will address the following:

- Introduction of the programme
- Pre-course motivational self-assessment exercise: at what level of understanding of health economics are you now and how do you compare to the industry benchmark?
- What you will master after the programme
- Tips on how to get started and how to get the most value out of the programme

II. SELF-STUDY – 5 MODULES & FINAL TEST (~7 h 30 min):

After the kick-off webinar, you have 4 weeks to complete the following 5 self-study modules and the final test:

MODULE 1 – QALYs & ICERs (~1 h 15 min)

- Why health economics, and more specifically: Why do we need health economic evaluations?
- Understanding the QALY, a commonly used measure to quantify the health impact of treatments across diseases
- Examples of utility scores, a key element in QALY calculations, and how changes over time impact on a patient's QALYs
- Different perspectives of the cost dimension of a new treatment
- Understanding the ICER, a commonly used measure to quantify the cost-effectiveness of treatments across diseases
- Terminology used by health economists for different types of health economic analyses

At the end of the module, you will need to solve 4 exercises on QALY and ICER calculations online.
Upon completion, you will get access to module 2, at the start of which Prof. Dr. Lieven Annemans explains the solutions.

MODULE 2 – Challenging the QALY and the Value of Health (~1 h 15 min)

- Pros & cons of the different methods used for obtaining the utility scores in QALY calculations
  - Direct methods: Time Trade Off and Standard Gamble
  - Indirect methods: EuroQoL5D and SF-36
- Shortcomings of the QALY approach, with a focus on the inaccuracies of utility scores in some diseases, and how this is being addressed
- Challenging the ICER thresholds
  - Pros & Cons of the different approaches of setting the thresholds: Benchmarking, GDP-based or at the discretion of the payer
  - Why disease burden and budget impact need to be considered in deciding what societies are willing to pay for innovations

At the end of the module, you will need to solve 3 exercises on the use of utility scores and ICER thresholds.

Agenda (Ctd.):

MODULE 3 – Decision Models for Health Economic Evaluations (~1 h 30 min)

- Decision Tree models, most often used for short term treatments
  - Understanding the logic and the maths of a simple decision tree for a hypothetical new treatment
  - Some real-life examples will illustrate that the same principle is used throughout often rather complex Decision Tree models
- Markov models, most often used for chronic diseases or diseases with sequelae
  - Understanding the logic and the maths of a simple Markov model for a hypothetical new treatment
  - Several real-life examples will illustrate that the same principle is applied throughout more complex Markov models
- Two key challenges that companies need to be prepared for when facing payers: Model validation and the need for sensitivity analyses to map and manage uncertainty around underlying data

At the end of the module, you will need to solve 2 exercises on the Decision Tree model and 1 on a Markov model.

MODULE 4 – The Cost Dimension and Budget Impact Analysis (~1 h 30 min)

- The cost dimension
  - A structured overview of cost categories that can be included in cost-effectiveness studies and how to reflect on those
  - The 3-step process for a cost calculation
  - Overview of potential data sources
  - Understanding the meaning of "discounted results"
- Budget impact analysis
  - Thinking from the payer's budget perspective
  - New elements that come into play on top of what is considered in cost-effectiveness studies
  - A real-life example in breast cancer that not only illustrates the complexity, but also the necessity for companies to do this seriously

At the end of the module, you will need to solve 2 exercises on the cost dimension and 1 on the budget impact analysis.

MODULE 5 – Health Economic Evaluations and Clinical Trials (~1 h)

- The tremendous value of health economic insights to pharma/medtech products throughout their entire lifecycle, from early product development onwards
- The conflicting views between clinical trialists and health economists
- How prospective health economic evaluations within clinical trials (also called pragmatic or naturalistic trials) can partly address the problem
- The added value of Real World Evidence to fill the evidence gaps and for demonstrating a products' value in the real world, e.g. outcomes based contracts

Final Test (~1 h)

The final test consists of 12 questions that span the content of the 5 modules. It allows you to digest and truly embed the learnings of the full programme.

III. CLOSING WEBINAR (~ 45 min)

Your Learning Coach will address the following:

- Overview of the solutions of the exercises in the final test
- Overview of the final test results of the group and a comparison with the industry benchmark

Dates:

The following 4-week online programmes are planned:

- **16 November, 2021 – 16 December, 2021**
  - Kick-off Webinar 16 November 2021, 14.00-15.00 CET/Brussels Time
  - Closing Webinar 16 December 2021, 14.00-14.45 CET/Brussels Time

- **18 January, 2022 – 17 February, 2022**
  - Kick-off Webinar 18 January 2022, 14.00-15.00 CET/Brussels Time
  - Closing Webinar 17 February 2022, 14.00-14.45 CET/Brussels Time

- **8 March, 2022 – 7 April, 2022**
  - Kick-off Webinar 8 March 2022, 14.00-15.00 CET/Brussels Time
  - Closing Webinar 7 April 2022, 14.00-14.45 CET/Brussels Time

- **31 May, 2022 – 30 June, 2022**
  - Kick-off Webinar 31 May 2022, 14.00-15.00 CET/Brussels Time
  - Closing Webinar 30 June 2022, 14.00-14.45 CET/Brussels Time

Visit ***www.celforpharma.com*** for registration fees and updates.

What participants say about this programme:

I joined this course with very little previous exposure to Health Economics concepts. This course was extremely beneficial and gave me in just a couple of weeks a good understanding of the basic concepts, tools and methods and how & when they should be applied. The tests that follow each of the 5 modules gave me the opportunity to understand what my knowledge gaps were and to solidify my notions. I highly recommend this course to every newcomer into access.

Takeda
Olivia Duta
Global Pricing Lead GI
Switzerland (February 2021)

This was one of the best online courses I had so far. Very structured approach to teaching, excellent speaker and useful exercises. I really enjoyed all the modules and fully recommend to any of my Medtech colleagues.

Medtronic
Danko Tomasic
Sr. Manager Marketing Services EMEA
Switzerland (March 2021)

Prof. Dr. Lieven Annemans opened the door to Health Economics by addressing complex issues in a very practical and enthusiastic way. On my side, the seed is planted and growing, there is no turning back. Thank you!

Daiichi Sankyo
Vitória Gemas, PhD
Medical Advisor Cardiovascular
Portugal (January 2021)