Module 6

Further Topics in Economic Evaluation

Module Workbook

2016 - 2017 academic year
Module 1
Basic Economic Concepts

Module 2
Health Economics: Concepts and Analysis

Module 3
Introduction to Health Care Evaluation

Module 4
The Economics of Health Care Systems

Module 5
Statistics for Health Economics

Module 6
Further Topics in Economic Evaluation

Module 7
Assessing the Impact of Medical Technologies on Health

Module 8
Outcome Measurement and Valuation

Module 9
Decision Analysis for Health Technology Assessment

PG Certificate

PG Diploma

MSc
STRUCTURE OF MODULE 6: Further Topics in Economic Evaluation

- **Unit 6.1**
  Fundamental Issues in Economic Evaluation
- **Unit 6.2**
  Introduction to Analysis of Individual Patient Data for Economic Evaluation
- **Unit 6.3**
  Introduction to Decision Modelling
- **Unit 6.4**
  Heterogeneity in Economic Evaluation
- **Unit 6.5**
  Reimbursement: Principles and Policy
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Guide to Module 6

Learning aims and objectives

This is a Level 7(M) module and is compensatable in certain circumstances. Please refer to the Programme Handbook, section 4, for full details.

Learning aims

To develop your understanding of the latest methods in economic evaluation, to apply these methods and to appraise critically published economic evaluation studies.

Learning objectives

Upon successful completion of the module you should be able to:

- Explain how the economic concepts of efficiency provide the foundations for the economic evaluation of health care technologies.
- Understand what the cost-effectiveness threshold represents and know how it might be estimated.
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• Use appropriate decision rules in cost benefit and cost-effectiveness analysis, including an understanding of the importance of incremental ratios, extended dominance, net health benefits.

• Explain and discuss the rationale for discounting health benefits and costs in economic evaluation.

• Explain and discuss the methods problems associated with economic evaluation alongside randomised controlled trials (RCTs).

• Explain the alternative approaches that have been proposed to handle and to describe the various forms of uncertainty when using individual patient level data from RCTs.

• Explain the rationale for decision analytic modelling for economic evaluation and describe its terminology.

• Structure and analyse decision problems using a decision tree and Markov model.

• Explain the difference between deterministic and probabilistic analysis in decision models.

• Explain the concept of heterogeneity in the context of economic evaluation of health care technologies.

• Identify the different sources of heterogeneity in economic evaluations.

• Explain the factors in an economic evaluation which may limit generalisability of the evidence, and to consider how these may impact on the results of the analysis and methods for addressing this.

• Explain the use, impact and challenges of using economic evaluation to support funding decisions for health care technologies and how this varies between jurisdictions.

In addition to these, you should ensure you can meet the learning objectives outlined at the start of each unit.
Credits, timing and assessed work

The module is worth **20 credits** and should take approximately **200 hours** to complete over **12 weeks** of study, including the module assessment (see below). The following is a guide to the amount of time you might spend on each unit, although you are of course free to fit your study time to your own circumstances.

- **w/c 27/3/2017 and 3/4/2017.** Weeks 1 and 2. Familiarisation with Module 6, aims and objectives, introduction and Unit 6.1.
- **w/c 8/5/2017 and 15/5/2017.** Weeks 7 and 8. Unit 6.4.
- **w/c 12/6/2017.** Week 12. Module assessment (15/6/2017 until 19/6/2017).

The two pieces of assessed work to be submitted on or before the dates detailed above are taken from exercises in the workbook and last year’s exam paper. They are:

- Assessed work piece 1: Exercise 6.9.
- Assessed work piece 2: Question 1 from the 2015-16 exam paper.

Please note that programme staff are under no obligation to mark assessed work that is submitted late. This applies to all modules.
Module assessment

The assessment for this module is by an open exam completed in week 12. The module is compensatable in certain circumstances. Please read the Programme Handbook carefully for the regulations regarding assessment and award at Postgraduate Diploma level. The exam is designed to be completed within a week alongside students’ usual activities (such as full time employment).

On-line learning: Yorkshare

The module is supported by the Yorkshare Academic Suite located at: vle.york.ac.uk

You can access this using your username and password which will be separately supplied. Exercises which should be discussed on Yorkshare are flagged in the text with the computer icon.

Reading

The main teaching materials are contained within this workbook. References to books and papers are noted in this workbook by the book icon. These may be ordered from the University of York’s library, or you might find them in your local UK Libraries Plus library. If you work in the NHS, your local professional librarian may prove helpful.

Where possible, you are advised to obtain the compulsory reading cited in the workbook well in advance of each unit.

The main text from Module 3 will also be used in this module:

In addition, the following book is supplied to you to accompany your study:


You may also wish to ensure that you have access to the following book, as this is referred to frequently during the module: Cost-Effectiveness in Health and Medicine. M.R. Gold, J.E. Siegel, L.B. Russell and M.C. Weinstein (eds). Oxford University Press 1996. ISBN 0195108248. Before purchasing this book please be aware that a second US panel on Cost-Effectiveness in Health and Medicine may shortly be published.

This reference is sometimes referred to in the text as the report of the ‘US Panel’. There is a useful glossary on pages 392 - 411.

Essential reading is marked in the text with a * either in the main body of the text or in footnotes.