Health Technology Assessment (HTA) as a Tool for Priority Setting
Prof. Finn Børlem Kristensen

CONTENT OF THE COURSE

The course is designed as a comprehensive introduction to the concepts, methods, and application of health technology assessment.

Specific topics that will be covered include: What is health technology? The link between policy and HTA. The multidisciplinary nature of HTA: contributing sciences. An overview of HTA methods – divided into main components: Evidence-based medicine, clinical and general epidemiology, critical appraisal of clinical literature, systematic reviews – principles and pitfalls, benefit / risk considerations, assessing organisational aspects of technology application in healthcare, assessing patient and social aspects of technology, and stakeholder involvement. Successful HTA interaction with healthcare policy and decision making.

Economic evaluation as part of HTA, and cross-border collaboration in HTA will be taught within the Module “Methodology and Practical Application of Economic Evaluation in Health Care”.

Examples and case studies are used to illustrate the main points and considerable emphasis is placed on learning through group work and exercises.

OBJECTIVES

By end of this course participants will have the knowledge and skills needed to be able to effectively ask for HTA to inform prioritisation and decision-making in a specific area – and to effectively use the information coming from HTA.

PREREQUISITES

The course is intended for graduate students who have a background in public management, economics, or the health disciplines. No previous knowledge of HTA is assumed.

PEDAGOGICAL METHOD

Lectures, interactive exercises, group discussions.

ASSESSMENT PROCEDURE

Group presentation and discussion on second day.
## DETAILED COURSE CONTENT AND STRUCTURE

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<thead>
<tr>
<th>Morning</th>
<th>Method</th>
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<tr>
<td>Monday</td>
<td>11.15am – 1pm</td>
<td>Monday</td>
<td>Exercises, group work and discussion</td>
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<td></td>
<td>Lectures</td>
<td>2pm – 5pm</td>
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<tr>
<td>Tuesday</td>
<td>10.45am – 1pm</td>
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<td>Exercises, group work and discussion</td>
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<td>Lectures, exercises</td>
<td>2pm – 4.30pm</td>
<td>Evaluation</td>
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<tr>
<td>Wednesday</td>
<td>10.45am – 1pm</td>
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<td>Co-teaching with Prof. Drummond and Prof. Barbieri</td>
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<td>Co-teaching with Prof. Drummond and Prof. Barbieri</td>
<td>2pm – 4.30pm</td>
<td>Co-teaching with Prof. Drummond and Prof. Barbieri</td>
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## CURRICULUM VITAE

Professor in health services research and health technology assessment at University of Southern Denmark from 1999. Director of European Network for Health Technology Assessment (EUnetHTA) Coordinating Secretariat, National Board of Health, Denmark since 2009. Chairman of the EUnetHTA Executive Committee. Formerly director of the Danish Centre for Health Technology Assessment (DACEHTA), National Board of Health, Denmark 1997–2009.


Publications:
Kristensen FB, Gerhardus, A. Health technology assessments: what do differing conclusions tell us? BMJ 2010; 341: 1029-31
Methodology and Practical Application of Economic Evaluation in Health Care
Prof. Mike Drummond and Prof. Marco Barbieri (UK)

CONTENT OF THE COURSE

The course is designed as an introduction to the concepts, methods, and application of economic evaluation in health care. Specific topics that will be covered include: an overview of economic evaluation methods, cost and benefit estimation, economic evaluation using patient-level data, economic evaluation using decision-analytic modelling, and using economic evaluation in healthcare decision-making. Numerous examples and case studies are used to illustrate the main points and considerable emphasis is placed on learning through group work and exercises. There will be ample opportunity for students to discuss any issues or problems they have already encountered in the field of economic evaluation. The course will be of particular benefit to those working in the health care sector who have a need to present a case for funding or reimbursement of particular health care treatments or programs.

OBJECTIVES

At the end of the course, the student will:
– be familiar with the concepts, methods and applications of economic evaluation in healthcare;
– understand costing methodology and the different approaches to valuing the benefits of health treatments;
– be able to undertake a critical appraisal of published studies;
– understand the limitations of clinical trials as a vehicle for economic evaluation;
– be familiar with decision-analytic modelling approaches, including the construction of decision trees and Markov models;
– appreciate the main issues in the use of economic evaluation in health care resource allocation decisions, including the reimbursement of health technologies;
– have an appreciation of future developments in the theory and application of economic evaluation in health care.

PREREQUISITES

The course is intended for graduate students (or equivalent) who have a background in economics, or the health disciplines. Some previous knowledge of economic evaluation is desirable, although this can be acquired through the pre-reading that is offered with this course. Some work experience in the health care sector is desirable, but not essential.

PEDAGOGICAL METHOD

Lectures, interactive exercises, group discussions

ASSESSMENT PROCEDURE

Written examination
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<th>Day</th>
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<tr>
<td>Wednesday</td>
<td>10.45am – 1pm</td>
<td><strong>Integrating economic evaluation into health technology assessment</strong></td>
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<td>Introduction to economic evaluation in health care</td>
<td>Lecture and discussion co-teaching with Prof. Kristensen</td>
<td>Wednesday</td>
<td><strong>Transferring HTAs across national borders</strong></td>
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<td>Key principles of health technology assessment for resource allocation decisions</td>
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<td>Challenges in transferring economic analyses</td>
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<td>Thursday</td>
<td>10.45am – 1pm</td>
<td><strong>Costing, including costing exercise</strong></td>
<td>Lectures, discussion and group work</td>
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<td><strong>Benefit measurement</strong></td>
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<td>Discounting in economic evaluation</td>
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<td>2pm – 4.30pm</td>
<td><strong>Utility estimation exercise</strong></td>
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<td><strong>Economic evaluation and social values</strong></td>
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<td>Friday</td>
<td>10.45am – 1pm</td>
<td><strong>Economic evaluation alongside clinical trials</strong></td>
<td>Lectures, discussion and group work</td>
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<td><strong>Decision-analytic modeling</strong></td>
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<td>Handling uncertainty</td>
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<td>2pm – 4.30pm</td>
<td><strong>Modeling exercise</strong></td>
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<td>Trial – based exercise</td>
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<td>Saturday</td>
<td>10.30am – 1pm</td>
<td><strong>Critical appraisal of published studies</strong></td>
<td>Lectures, discussion and group work</td>
<td>Saturday</td>
<td><strong>Using economic evaluation in decision-making</strong></td>
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<td>2pm – 4pm</td>
<td>Course assessment</td>
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**COURSE 2B**

Summer School in Public Health Policy, Economics and Management
CURRICULUM VITAE

Dr. Mike Drummond is Professor of Health Economics and former Director of the Centre for Health Economics at the University of York. His particular field of interest is in the economic evaluation of health care treatments and programmes. He has undertaken evaluations in a wide range of medical fields including care of the elderly, neonatal intensive care, immunization programmes, services for people with AIDS, eye health care and pharmaceuticals. He is the author of two major textbooks and more than 600 scientific papers, has acted as a consultant to the World Health Organization and was Project Leader of a European Union Project on the Methodology of Economic Appraisal of Health Technology. He has been President of the International Society of Technology Assessment in Health Care, and the International Society for Pharmacoconomics and Outcomes Research. He is currently a member of the Guidelines Review Panels of the National Institute for Health and Clinical Excellence (NICE) in the UK, and is a Principal Consultant for OptumInsight.

His most important publications are:


Marco Barbieri, M.Sc. is a Research Associate of i3Innovus Research Ltd and a Associate Researcher of CRES (Economics and Health Research Centre), University Pompeu Fabra, Barcelona (Spain). He holds a B.Sc. in Economics from the University of Bologna (Italy) and an M.Sc. in Health Economics from the University of York (UK). He spent two years working as a Research Fellow at the Centre for Health Economics, University of York, where he has undertaken a wide range of research including cost-effectiveness modelling in rheumatoid arthritis and cardiovascular disease, study of patient preference measurement and the application of evidence to decision making in health care. He has been involved in several health technology assessments, including systematic reviews of economic evaluations of treatments for bipolar disorder and for second-line advanced ovarian cancer. His particular field of interest is associated with issues of transferability of data among jurisdictions.