A two and a half-day course focusing on the use of duration data with wide applicability to research in health economics. Econometric models of durations are used to model the length of time spent in a given state before transition to another state. Durations may, for example, consist of time to death, time spent in a health state or free from ill-health, and time spent in hospital. Typically, standard regression based techniques are not appropriate for modelling such data and instead attention needs to be given to the choice of distribution function, the sampling scheme used to derive durations, the censored nature of duration spells and possible transitions to one of several states. Duration spells or the probability of a transition out of a state may be modelled.

The course will be delivered by Professor Maarten Lindeboom, a renowned expert in micro-econometrics and the analysis of duration models.

The course is aimed at PhD students and researchers or policy makers working in applied health economics. It will introduce participants to different treatments for duration data with a focus on established and recently developed techniques. Appropriate terminology and formal methodology for estimating these models will be presented together with extensions to cover unobserved heterogeneity, multiple spells and competing risk models. The focus will be on introducing the fundamental principles and concepts encountered in the literature.

The aims of the course are to introduce research professionals to the main techniques used in the analysis of time-to-event or duration models. Lectures will be complemented by practical computer-based exercises. By the end of the course, participants should be able to:

- Appreciate different approaches to modelling duration data
- Select appropriate methods for empirical estimation
- Develop an understanding of methods for estimation and inference
- Interpret results from analyses
Course content

The course will cover topics relevant to the analysis of health and health care data. The provisional programme is outlined below.

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For further reading it is recommended that participants consult:


The course will be held in the EXEC/computer-training lab in the Alcuin Research Resource Centre (ARRC: [http://www.york.ac.uk/inst/arrc/](http://www.york.ac.uk/inst/arrc/)). The software package used for the practical sessions is Stata and each participant will have access to a PC with Stata 11 installed. Stata do-files containing the code required to complete the practical exercises will be provided. A basic familiarisation with Stata will be an advantage. Further information on Stata can be found at: [http://www/stata.com/](http://www/stata.com/)

Data sources relevant to the practical exercises will be provided.

The programme

The course will be lead by Professor Maarten Lindeboom and supported by members of HEDG.
REGISTRATION FORM

Methods for the analysis of categorical dependent variables
Prof. Maarten Lindeboom

A short course hosted by the Health, Econometrics and Data Group (HEDG),
University of York, 12th-14th January 2011

Participation on the course is free of charge. Please note places are limited. A list of
local accommodation in York for the nights of 12th and 13th January will be provided
and participants are asked to make their own arrangements. Limited funds will be
made available to reimburse reasonable travel expenses.

Title: Dr/Ms/Mr ______________________________________________________

Name: _____________________________________________________________

Position: __________________________________________________________

Organisation: _______________________________________________________

Postal Address: ______________________________________________________

Postcode: _____________________

Email: ________________________

Tel: __________________________ Fax: ________________________

Please post or fax your registration forms to:
Kerry Atkinson, Course Administrator, Centre for Health Economics, Alcuin A Block,
University of York, Heslington, YORK, YO10 5DD, UK, Fax: +44 (0) 1904 321402.
Email: kja3@york.ac.uk

Alternatively online registration will be available shortly:
http://www.york.ac.uk/res/herc/research/hedg/index.htm

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Economic and Social Research Council under the grant RES-060-25-0045.