

**INTRODUCTION TO APPLIED HEALTH ECONOMICS**  
***Methods for the analysis of panel data  
in health and health care***

3 day computer-based course

***Hosted by the Health, Econometrics and Data Group (HEDG),  
University of York, 7<sup>th</sup>-9<sup>th</sup> November 2012***

A three-day course focusing on the use of applied quantitative methods for the analysis of panel data encountered in health and health care. The course is run by the Health, Econometrics and Data Group, a collaboration between the Centre for Health Economics and the Department of Economics and Related Studies at the University of York.

The course is aimed at PhD students and junior researchers or policy makers working in applied health economics.

The course will explain applied health economics methods relevant to the analysis of panel data obtained from administrative or observational sources. Topics to be covered include: an introduction to panel data techniques including linear models and fixed and random effects; instrumental variables; non-linear panel data models; dynamic models; discrete-time duration models. Throughout the course, computer-based practical exercises will be used to show how these methods can be applied using the statistical package Stata.

The aims of the course are to introduce young professionals to the main techniques used in applied health economics, and to provide practical experience with the application of such techniques. By the end of the course, participants should be able to:

- formulate empirical problems involving longitudinal micro-data on health and health care
- select appropriate econometric methods
- understand methods of estimation and be able to implement them, using appropriate software
- interpret the results of the analysis

## Course content

The course will cover topics relevant to the analysis of health and health care data. Sessions will be split between lectures and computer-based practicals.

<b>Provisional programme</b>	<b>Morning</b>	<b>Afternoon</b>
<b>Day One</b>	10.15-11.00 Registration Introduction to panel data	Linear panel data models
<b>Day Two</b>	Linear instrumental variables for panel data	Non-linear panel data models
<b>Day Three</b>	Dynamic panel data models	Discrete-time duration models 5.00pm finish

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/> ). The software package used for the practical examples is Stata and each participant will have access to a PC with Stata 12 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/>

Data sources relevant to the practical exercises will be provided.

## The programme

The course will be provided by members of HEDG: Andrew Jones, Nigel Rice, Eugenio Zucchelli, James Lomas, Daniel Howdon.



**REGISTRATION FORM**  
**Methods for the analysis of panel data**  
**in health and health care**

*A short course hosted by the Health, Econometrics and Data Group (HEDG),  
University of York, 7<sup>th</sup>-9<sup>th</sup> November 2012*

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

Please note places for this course are limited to 30 participants.

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.

Alternatively online registration will be available shortly:

<http://www.york.ac.uk/res/herc/research/hedg/index.htm>

*The Health, Econometrics and Data Group is supported by funding from the  
Economic and Social Research Council under the grant RES-060-25-0045.*