THE UNIVERSITY of York

HEALTH ECONOMICS
News from CHE

THE QUEEN'S ANNIVERSARY PRIZES 2007

CHE Centre For Health Economics

Issue 5 March 2009

Latest news

Staff at CHE made a major contribution to the University's 'Health Services Research' submission to the 2008 Research Assessment Exercise. The assessment panel judged that 35% of the submission was 'world leading', and a further 40% of 'internationally excellent' quality. The Guardian newspaper placed York at the top of its league table of achievement for Health Service Research. It underlines the high quality of the research undertaken at CHE and related departments at York.

Courses

York Expert Workshops in the Socio Economic Evaluation of Medicines

To inform and promote understanding in key areas of quality of life assessment and health economic evaluation.

Quality of Life
24th – 26th June 2009

Foundations of Economic Evaluation in Health Care
29th June – 3rd July 2009

Meeting Decision-Makers' Requirements: Advanced Methods for Cost-Effectiveness Analysis
6th July – 10th July 2009

An Introduction to Measuring Efficiency in Public Sector Organisations: analytical techniques and policy

This three-day course will be held at the University of York on 12 - 14 October 2009

For more information please visit our website page at www.york.ac.uk/inst/che/training/index.htm

Welcome to the fifth edition of the Centre for Health Economics electronic newsletter. The objective of the newsletter is to keep policy makers, researchers and practitioners informed about recent developments at the Centre, including completed research and forthcoming events. For further information please visit our website www.york.ac.uk/inst/che

On 3 November 2008 CHE celebrated its 25th Anniversary and the award of the Queen's Anniversary Prize. As this was a double celebration of CHE's achievements over the years and a tribute to everyone, past and present who has contributed to Health Economics at York, it was most fitting that current staff were joined by CHE alumni and associates. There were tributes to the special quality of the diversity of CHE's research staff and students, and the contribution of CHE's support staff.

International comparison of public sector performance

Silvana Robone, Nigel Rice, Peter Smith

Increasingly patients' views and opinions are being recognized as an essential means for assessing the provision of health services, to stimulate quality improvements and more recently, in measuring health systems performance. While traditionally patients' views were sought on the quality of care provided and satisfaction with health services, in the context of performance assessment the concept of responsiveness has been promoted as a more desirable measure by which health systems can be judged. In broad terms, health system responsiveness has been defined as the way in which individuals are treated and the environment in which they are treated, encompassing the notion of an individual's experience of contact with the health system.

Perhaps the most ambitious attempt to implement a cross-country comparative instrument aimed at measuring health system performance is the World Health Survey (WHS) which includes modules on the responsiveness of a system to user preferences. Respondents are asked to rate their experiences of health systems using a 5-point categorical scale (e.g. 'very good' to 'very bad'). A common problem with such data is that individuals, when faced with the instrument, are likely to interpret the meaning of the response categories in a way that systematically differs across populations or population sub-groups. The response categories will then not be comparable across populations.

Our research makes use of what has been termed the HOPIT model, which exploits information provided by what are known as 'anchoring vignettes' to account for systematic variations in reporting behaviour when comparing a construct such as responsiveness. Anchoring vignettes represent hypothetical descriptions of a health care encounter that are presented to all respondents. Since the vignettes are fixed and pre-determined, any systematic variation across individuals in the rating of the vignettes can be attributed to differences in reporting behaviour.

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Figure 1 illustrates the issue by presenting individuals' reports of their own experiences of contact with the health system together with ratings of five vignettes in connection with the domain 'clarity of communication' between patient and provider. It is notable that there is no unanimity amongst individuals in how they rate the vignettes, even though each vignette describes a fixed level of responsiveness. Figure 2 further shows how the rating of the vignette varies across socio-economic groups, in this case by income quintiles.

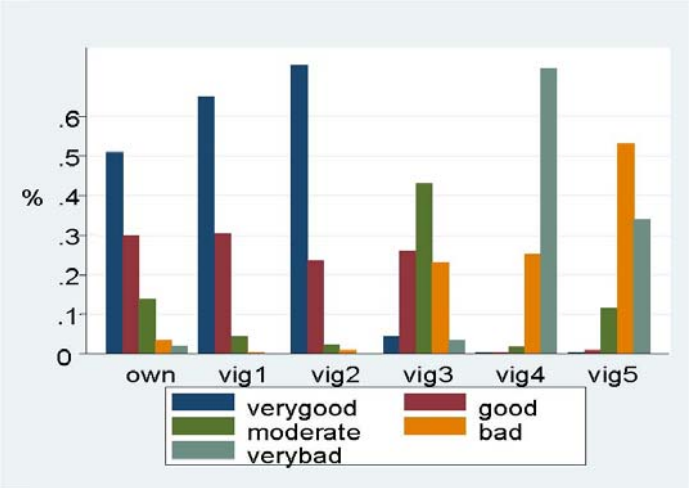

Figure 1: Clarity of Communication

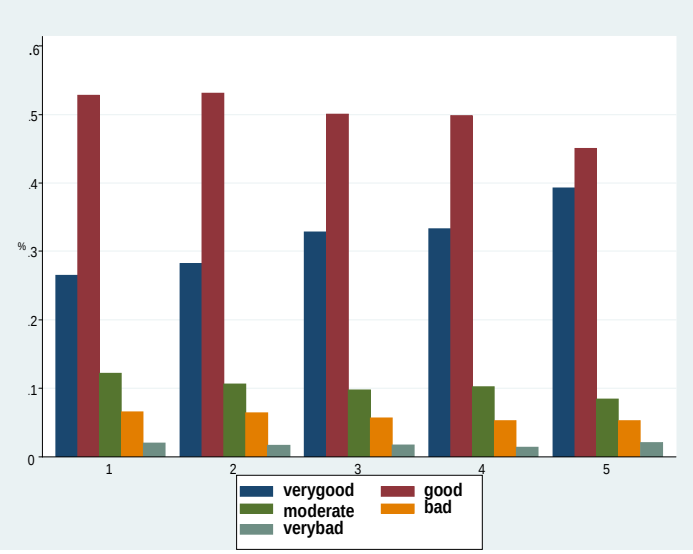

Figure 2: Clarity of Communication, by income quintiles

Use of the HOPIT model allows systematic reporting behaviour to be modelled as a function of individuals' characteristics. Our results indicate that differential reporting behaviour is mainly a function of income and education. However, reporting also varies across countries.

Adjusting for differential reporting within and across countries can change country rankings of health system performance. Table 1 compares the frequencies of reporting 'very good' responsiveness observed in the raw data with those obtained once adjustment for systematic reporting behaviour has been undertaken using the HOPIT model. The table shows the top ten rankings before and after adjustment for a group of countries categorised using the Human Development Index. The HOPIT model anchors responses to a chosen benchmark, in this case Mexico, such that reporting behaviour is related to a single common scale.

Table 1: Rankings of health system responsiveness

Rank	Raw Frequencies	Anchored Frequencies
1	Austria (61.9%)	Finland (55.1%)
2	Denmark (61.0%)	Denmark (54.6%)
3	Sweden (55.8%)	Sweden (54.5%)
4	Czech Rep. (52.9%)	Belgium (42.9%)
5	UK (51.4%)	France (40.3%)
6	Greece (51.0%)	UK (39.9%)
7	Finland (49.3%)	Netherlands (38.8%)
8	Hungary (47.8%)	Uruguay (35.6%)
9	France (47.6%)	Czech Rep. (32.2%)
10	Ireland (45.7%)	Estonia (28.5%)

The results reported in Table 1 show considerable movement in the rankings of certain countries once adjustment for reporting behaviour has been undertaken. Our analysis suggests that correcting for the presence of reporting behaviour is important when undertaking cross-country comparative analysis based on survey data. We believe the use of anchoring vignettes can offer valuable insights into the reporting behaviour of individuals and has utility as a method for promoting greater comparability in cross-country analyses.

Further details of this paper can be found at www.york.ac.uk/res/herc/documents/wp/08_28.pdf

Studentships

Up to 3 ESRC project linked PhD studentships are available in the **Health, Econometrics and Data Group (HEDG).** HEDG is an initiative involving collaboration between CHE and the Department of Economics and Related Studies (DERS), with a focus on the quantitative analysis of health, health-related behaviour and health care.

The studentships are available from 1st October 2009 and the deadline for applications is 1 April 2009.

Further details are available on the website http://www.york.ac.uk/res/herc/research/hedg/index.htm

New funding

Giorgia Marini, Maria Goddard, Rowena Jacobs and Marisa Miraldo
'The economics of organisations: The case of Foundation Trusts'. Sponsored by the Nuffield Foundation.
Duration: 1.8.09 - 31.12.09.

Mark Sculpher
'Principles, practice, opportunities and challenges of coverage with evidence development (CED)'. Sponsored by Pfizer Limited.
Duration: 1.11.08 - 30.6.09.

Peter Smith and Andrew Street
'EURO DRG - Diagnosis-related groups in Europe: towards efficiency and quality'. Sponsored by the EC.
Duration: 1.1.09 - 31.12.11.

Establishing a fair playing field for the NHS and private sectors: equal pay for equal work?

Anne Mason, Marisa Miraldo, Luigi Siciliani, Peter Sivey, Andrew Street





Since 2004 NHS patients have been given the opportunity to be treated by private rather than NHS providers. Most private (or 'independent sector') providers are treatment centres that specialise in one or two high volume procedures, such as hip replacements or cataract removals, and that avoid taking on complex operations.

The House of Commons Health Committee was critical of generous contractual terms for first and second wave private providers, although these encouraged market entry and covered start-up costs. Current contracts are supposed to be the same for NHS and private providers under 'Payment by Results', whereby providers receive a fixed national price for treating the same type of patient. We analysed data in the Hospital Episode Statistics (HES) for 2005/6 and 2006/7 to assess the correspondence between contracted and reported levels of activity and whether NHS and private providers were indeed treating the "same" type of patient in each payment category (or Healthcare Resource Group).

We found that reported activity falls well below contracted levels and that some private companies are not meeting their contractual obligations to provide accurate HES data. Figure 1 shows that many private providers fail to record the diagnostic information required to determine the patient's payment category, making it impossible to identify what types of patient have been treated. Other private providers achieve similar levels of coding completeness to NHS providers, suggesting that high quality coding is possible. To ensure that private sector providers have a clear incentive to make proper returns, payment for treatment should be contingent upon the quality of data, as it is for NHS providers.

There is also evidence that NHS providers are treating patients of greater complexity than private providers. Specifically, patients treated in NHS hospitals are more likely to come from more deprived areas; to have more diagnoses; and to undergo significantly more procedures than patients seen by the private providers. If these differences drive costs, then payments for treatment should be refined to ensure that providers are reimbursed fairly.

Details of our analysis, together with our review of how to reimburse private providers under Payment by Results, are available in:

Mason A, Miraldo M, Siciliani L, Sivey P, Street A. Establishing a fair playing field for payment by results: Centre for Health Economics, University of York. CHE Research Paper 39; 2008. www.york.ac.uk/inst/che/pdf/rp39.pdf

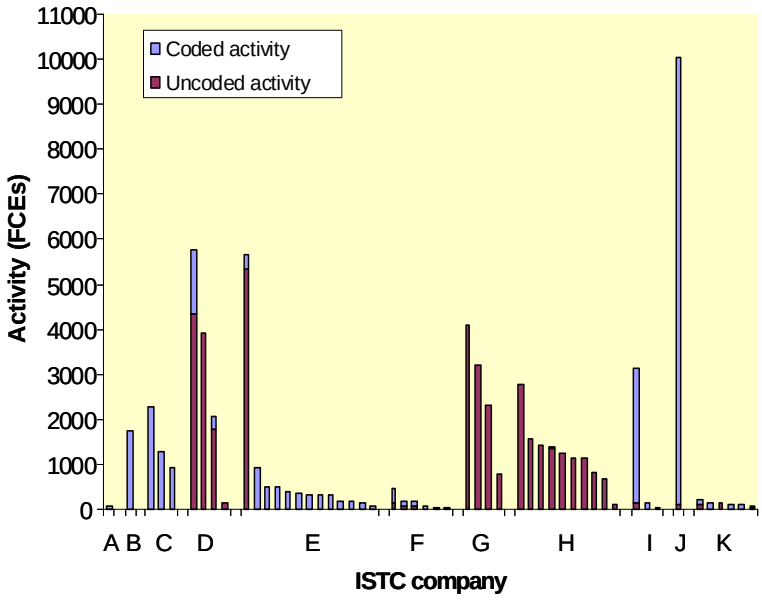

Figure 1: Coded and uncoded activity by ISTCs: 2006/7

Notes: where individual treatment centres provided fewer than 50 NHS episodes, data are aggregated and shown as a single bar at the end of the range. FCE: finished consultant episode

CHE Research Papers

CHE has a research paper series which gives early release of research findings. The following have recently been published and are free to download www.york.ac.uk/inst/che/publications/publicationsbyyear.htm

RP44 Budgetary policies and available actions: a generalisation of decision rules for allocation and research decisions - **Claire McKenna,** Zaid Chalabi, **David Epstein and Karl Claxton**

RP 45 Price regulation of pluralistic markets subject to provider collusion - **Roberta Longo, Marisa Miraldo, Andrew Street**

Publications

Bansback N, Sun H, Guh D, Li X, Nosyk B, **Griffin S**, et al. The impact of using a recall period on the measurement of health utilities for acute events. *Health Economics*. 2008;17(12):1413-1419.:a3182.

Drummond M, Mason A. Rationing new medicines in the UK: A fair and consistent process is needed for dealing with absence of evidence (invited editorial) *BMJ*. 2009;338:a3182.

Drummond M, Weatherly H, Ferguson B. Economic evaluation of health interventions: a broader perspective is needed that include potential cost and benefits for all stakeholders. *BMJ*. 2008;337:a1204

Dusheiko M, **Goddard M**, **Gravelle H, Jacobs R**. Explaining trends in concentration of health care commissioning in the English NHS. *Health Economics*. 2008;17(8):907-26.

Fabbri D, **Robone S**. The geography of hospital admission in a National Health Service with patient choice: evidence from Italy. *HEDG Working Paper*. 2008;8/29.

Grant A, Wileman S, Ramsay C, **Bojke L, Epstein D, Sculpher M**, et al. The effectiveness and cost-effectiveness of minimal access surgery amongst people with gastro-oesophageal reflux disease - a UK collaborative study. The REFLUX trial. *Health Technology Assessment*. 2008;12(31):1-204.

Jones AM, Hernandez-Quevedo C, **Rice N**, Lopez Nicolas A. The analysis of health inequalities: a brief overview of methods. *Cuadernos Economicos del ICE*. 2008;75:11-20.

Jones AM, Hernandez-Quevedo C, **Rice N**. Reporting bias and heterogeneity in self-assessed health: evidence from the British Household Panel Survey. *Cuadernos Economicos del ICE.* 2008;75:63-97.

Mannion R, **Street A**. Managing activity and expenditure in the new NHS market: evidence from South Yorkshire. *Public Money and Management*. 2007;29(1):27-34.

Martin S, **Rice N**, **Smith PC**. Does health care spending improve health outcomes? Evidence from English programme budgeting data. *Journal of Health Economics*. 2008;27(4):826-42.

Mason AR, **Drummond M.** Public funding of new cancer drugs: Is NICE getting nastier? *European Journal of Cancer*. 2009;doi:10.1016/j.ejca.2008.11.040.

McKenna C, Palmer S, Rodgers M, et al. Cost-effectiveness of radiofrequency catheter ablation for the treatment of atrial fibrillation in the UK. *Heart*. 2008 Dec;doi:10.1136.

McKenna C, Bojke L, Manca A, et al. Shoulder acute pain in primary healthcare: Is retraining GP's effective (SAPPHIRE) randomised trial - cost effectiveness analysis. *Rheumatology*. 2008 December;47:1795-1802.

Morris S, Ma A, McConnachie A, **Rice N**, Skatun D, Sutton M. Analysis of consultants' NHS and private incomes in England in 2003/4: the role of age contract type, specialty and region of place of work. *Journal of the Royal Society of Medicine.* 2008;101:372-80.

Rice N, Robone S, **Smith PC**. International comparison of public sector performance: The use of anchoring vignettes to adjust self-reported data. *HEDG Working Paper.* 2008;8/28.

Rice N, Robone S, **Smith P.** The measurement and comparison of health system responsiveness. *HEDG Working Paper*. 2008;08/05.

Richardson G, Bloor K, Williams J, Russell I, Durai D, Cheung W-Y, et al. Cost-Effectiveness of Nurse-Delivered Endoscopy: findings from a randomised Multi-Institution Nurse Endoscopy Trial (MINuET) *BMJ*. 2009;338:b270, doi:10.1136/bmj.b270

Robone S, Jones AM, **Rice N.** Contractual conditions, working conditions, health and well-being in the British Household Panel Survey. *HEDG Working Paper*. 2008;08/19.

Rodgers M, **McKenna C, Palmer S**, et al. Curative catheter ablation in atrial fibrillation and typical atrial flutter: systematic review and economic evaluation. *Health Technology Assessment*. 2008;12(34).

Rogers A, Kennedy A, Reeves D, Bower P, Lee V, Gardner C, Gately C, **Richardson G**. The UK Expert Patients Programme: Results and Implications from a National Evaluation. *Medical Journal of Australia*. 2008:289(10Suppl):S21-S24.

Ryan M, **Griffin S**, Chitah B, **Walker SA,** Mulenga V, Kalolo D, **Hawkins N, Sculpher MJ**, et al. The cost-effectiveness of cotrimoxazole prophylaxis in HIV-infected children in Zambia. *Aids*. 2008;22:749-57.

Williams J, Russell I, Durai D, Cheung W-Y, Farrin A, Bloor K, Coulton S, **Richardson G.**. Effectiveness of Nurse-Delivered Endoscopy: Findings from a Randomised Multi-Institution Nurse Endoscopy Trial (MINuET) *British Medical Journal*. 2009;338:b231, doi:10.1136/bmj.b231.

Conference, seminar and workshop presentations

Roy Carr-Hill has been working with the Serbian health minister to finalise the design of a capitation system for their Primary Health Care system. He also presented a paper on 'Using health service data for evidence based policy making' to the South Eastern Europe Health Management Conference in Belgrade.

Mike Drummond gave a keynote address at the Patient Classification Systems International Conference on 9 October in Lisbon, entitled 'The use of hospital cost estimates in the assessment of health technologies'. Later the same month at the annual meeting of the Society for Medical Decision Making in Philadelphia, he co-chaired a symposium on 'Key principles for conduct of comparative effectiveness research'. Following teaching aspects of economic evaluation at a number of workshop sessions in Argentina at the end of October, Mike was then speaking and participating in a number of sessions at the ISPOR European Congress, Athens, including a Plenary Session on 'Can we agree on international standards for economic evaluation?' Mike was a plenary speaker at a workshop hosted by Mexico's Ministry of Health on the use of economic evaluation in decisions about the drugs included in Mexico's national formulary. He was also a plenary speaker at a workshop in Dusseldorf, discussing Germany's Institute for Quality and Efficiency in Health Care (IQWiG). He spoke on 'Issues arising in the implementation of the IQWiG methods guidelines'.

Mark Sculpher and Peter Smith gave oral evidence to the House of Commons Health Select Committee as part of its enquiry into health inequalities.

Peter Smith has been appointed to the Advisory Council on Healthcare Systems for the World Economic Forum. In November, Peter acted as rapporteur for the Council at the Forum's 'Summit on the global agenda' in Dubai. Peter has also been appointed to the NHS Cooperation and Competition Panel, a newly created board that will advise the Secretary of State on the development of co-operation, patient choice and competition within the NHS. In December, he was an invited discussant at a conference on the research agenda for Global Health Systems held at the Harvard School of Public Health. Peter also spoke on the performance of the UK health system at the 'Health of the Nation Summit' organized by the *Lancet* in February.

CHE Seminar Series

Date: Thursday, 2nd April Time: 2.00pm to 3.15pm
Venue: ARRC Auditorium RC/014
Speaker: Dr Adam Oliver, LSE Health and Dept. Social Policy, London School of Economics.
Title: Assessing the influence of gestalt-type characteristics on preferences over lifetime health profiles.

Date: Thursday, 7th May Time: 2:00pm to 3:15pm
Venue: ARRC Auditorium RC/014
Speaker: Sofia Dimakou. City Health Economics Centre, City University, London
Title: How have waiting time targets in the UK's National Health Service affected waiting list management by hospitals and surgeons?

Date: Thursday, 13th May Time: 1:00pm to 2:0pm
Venue: Alcuin A Block A/019 and A/020
Speaker: Professor Ben Van Hout, Pharmerit Ltd, UK
Title: The value of added years of life as a function of age, prognosis and quality of life.

Date: Thursday, 4th June Time: 2:00pm to 3:15pm
Venue: ARRC Auditorium RC/014
Speaker: Frank Windmeijer. Professor of Econometrics, University of Bristol
Title: Incentives and targets in hospital care: evidence from a natural experiment.

Date: Thursday, 2nd July Time: 2:00pm to 3:15pm
Venue: ARRC Auditorium RC/014
Speaker: Professor Nancy Devlin, Director of Research, Office of Health Economics, London
Title: Using the EQ-5D as a performance measurement tool in the NHS.

Visit our website for further details on the CHE Seminar series and our series of specialist seminars in economic evaluation: www.york.ac.uk/inst/che/seminars/index.htm