

## Health **Economics** News

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#### Welcome to the CHE Newsletter

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Anniversary Prizes

2007



## Do Smoking Bans have an Impact on Smoking?

Research team: Nigel Rice (CHE), Eugenio Zucchelli (CHE), Andrew M Jones (Department of Economics and Related Studies, University of York), Audrey Laporte (Department of Health Policy, Management & Evaluation, University of Toronto).

The literature on the effects of public smoking bans presents conflicting results. Whereas smoking bans appear to reduce exposure to passive smoking, there is limited evidence on their impact on active smoking. Moreover, there is sparse evidence from a UK perspective and few studies apply robust policy evaluation techniques.

The policy change introduced by the UK Government afforded an opportunity to evaluate the impact of smoking bans on smoking and we were able to exploit the policy experiment that resulted from the differential timing of the introduction of the Scottish and English public smoking bans.

In our research we used a theoretical model of smoking behaviour that defines an individual's life-cycle addiction and cigarette consumption in the presence and absence of a public smoking ban. The model showed that the imposition of a public smoking ban should affect individuals differently according to their age, gender and previous level of cigarette consumption. We tested the predictions of our theoretical model by employing a series of econometric methods common to the policy evaluation literature on data drawn from the British Household Panel Survey (BHPS).

Contrary to the majority of the epidemiological and public health studies, we found that the introduction of the UK smoking bans had no impact on overall smoking prevalence. While significant differences were identified in smoking trends by population sub-groups throughout the entire survey period, there was insufficient evidence to conclude that the bans affected the level of cigarette consumption.

For more information see www



# Hospital competition has not undermined NHS fairness

Research team: Richard Cookson (CHE), Mauro Laudicella (Imperial College Business School) Paolo Li Donni (University of Palermo)

Critics of the NHS reforms have long worried that market forces may undermine equity, or fairness of access, in health care. However, research at CHE has found that hospital competition in the English NHS over the last two decades led to no substantial change in the relative amount of hospital treatment received by people living in more and in less deprived neighbourhoods. In the first analysis of its kind, comprehensive national data on all hospital patients in England was analysed. By using methods that can take account of other factors that may potentially influence the delivery of treatment, such as the growth in NHS expenditure, our research isolated the impact of competition on equity.

For more information see CHE Research Papers 66 and 67.

# Does it cost more to achieve better patient outcomes?

Research team: Nils Gutacker, Chris Bojke, Silvio Daidone, Andrew Street (CHE); Nancy Devlin (Office of Health Economics); David Parkin (NHS)

Researchers from CHE, the Office of Health Economics, and NHS South of England have been exploring the link between hospital costs and patients' health outcomes. This study uses information on patient reported health measures (PROMs) collected for all NHS patients having hip or knee surgery, varicose vein or hernia operations. There is substantial variation among hospitals in the costs of treating patients with these conditions, even after accounting for patient characteristics and health outcomes and for the environment in which hospitals operate. While higher costs are generally associated with better outcomes, our research shows that there are some high cost hospitals achieving poor health outcomes. This means that hospitals cannot simply claim that their superior outcomes justify their higher costs.

For more information see CHE Research Paper 68. www

#### CHE research for a new NICE programme

Research team: Claire McKenna, Rita Faria and Mark Sculpher (CHE); Ros Wade, Huiqin Yang, Lisa Stirk, Nerys Woolacott (Centre for Reviews & Dissemination); Nigel Gummerson, (NHS Trust Leeds)

The National Institute for Health and Clinical Excellence (NICE) has been appraising medical technologies since the advent of the Institute in 1999. However, until recently this work has focussed predominately on newly licensed pharmaceuticals. NICE has recently added an element of work focussing entirely on diagnostics - the Diagnostic Appraisal Programme. This includes measurements and tests that are used to evaluate a patient's condition such as physiological measurements, laboratory, pathology and imaging tests, and endoscopy. As part of CHE's programme of technology assessment at NICE in collaboration with the Centre for Reviews and Dissemination at the University of York, we have recently completed a technology assessment in diagnostics: EOS, which is a new x-ray imaging system. An assessment of new technologies to improve the accuracy of diagnostic methods for suspicious cervical lesions following screening is currently underway.



For more information see www

#### **Staff news**

In October,
Professor
Michael
Drummond
was inducted
as a foreign
member into
the US Institute
of Medicine of
the National
Academy of
Sciences, his
citation being:
"in recognition



of outstanding contribution to the field of health". Professor Drummond

was received into membership by the President, Dr Harvey Fineberg. The Institute, which advises policy makers and professionals on medical and health issues, received 70 people chosen for outstanding professional achievement and commitment to service. Election to the IOM is considered one of the highest honours in the fields of health and medicine.

Congratulations to **Manuel Espinoza** on winning the Best Student Podium Presentation prize at the 14th Annual European Congress of the International

Society for Pharmacoeconomics and Outcomes Research (ISPOR) held on 5-8 November in Madrid Spain. His paper was entitled "The value of heterogeneity for cost-effectiveness subgroup analysis: theoretical framework and application".



#### **Conference and workshop presentations**

Andrew Street gave the plenary address at the Patient Classification Systems International Conference, Montreal, Canada (19-21 October), and spoke at the EuroDRG conference held in Berlin (17 November). He was also appointed to the Board of the Research Council of Norway's Health and Care Services and to the National Institute for Health Research's Health Services and Delivery Research Commissioning Board (2012-2014).

Mark Sculpher, Karl Claxton, Bernard van den Berg, Susan Griffin, Eldon Spackman, Claire McKenna and Simon Walker were invited to take part in a series of workshops to update the Guide to the Methods of Technology Appraisal used by the National Institute for Health and Clinical Excellence (NICE). More information about the update to the Methods Guide can be found here:

Richard Cookson and Susan Griffin were invited to talk on "Incorporating concern for health inequality into cost effectiveness analysis" at a meeting of the EU Equity Action project at the Department of Health, London on 15 November.

In November at the ISPOR 14th Annual European Congress in Madrid, Mike Drummond was a presentation author, moderated two sessions and was a discussion leader for two sessions. Prof Mark Sculpher also contributed to several papers including methods of assessing the value of diagnostic technologies and the role of multicriteria decision analysis in health technology appraisal.

On 17/18 October, **Adriana Castelli** was invited to give a seminar at the Institut de Recherche et Documentation en Economie de la Santé (IRDES) in Paris on 'Measuring NHS Outputs, Inputs and Productivity'. She also spent a day working as a consultant to a new project at IRDES.

#### **Courses and workshops**

Advanced modelling methods for health economic evaluation Wednesday 21 - Friday 23 March 2012

### Regression methods for health economic evaluation

Half-day introduction: Monday 26 March 2012 (1.00pm - 6.00pm) Full course: Tuesday 27 - Thursday 29 March 2012

Analysing patient data using hospital episode statistics (HES) to evaluate healthcare policy and practice Monday 28 - Wednesday 30 May 2012

York expert workshops in the socio economic evaluation of medicines

**Quality of Life Workshop**: Wednesday 27 - Friday 29 June 2012

Foundations Workshop: Monday 2 - Friday 6 July 2012

**Advanced Workshop**: Monday 9 - Friday 13 July 2012

For details of all CHE courses and workshops see our website. www

#### **New funding**

Optimising clinical care strategies and laboratory monitoring for cost-effective roll-out of antiretroviral therapy in Africa: the lab-lite project, **Paul Revill.** Funded from the Department for International Development (DFiD) (via the Medical Research Council - Clinical Trials Unit (MRC-CTU)

AntiRetroviral Research for Wattoto (ARROW) = Young Lives: the social contexts and economic realities of paediatric anti-retroviral therapy, Mark Sculpher, Paul Revill, Susan Griffin, Bernard van den Berg. Funded from DFiD (via MRC-CTU)

Methods of extrapolating RCT evidence for use in economic evaluation models, **Steve Palmer, Laura Bojke, Andrea Manca, Miqdad Asaria.** Funded from the MRC

Transfusion alternatives pre-operatively (TAPS), **Mark Sculpher, Eldon Spackman.** Funded from NHS Blood & Transplant

Surgical wounds, **Karl Claxton, Marta Soares.** Funded from the National Institute for Health Research (NIHR)

Screening for psychological and mental health differences of young people who offend, **Stephen Palmer.** Funded from the National Institute for Health Research, Health Technology Assessment programme (NIHR HTA)

Breathing techniques for breathlessness in lung cancer, **Gerry Richardson.**Funded from the National Institute for Health Research, Research for Patient Benefit (NIHR RfPB)

Measuring the productivity of the NHS, Andrew Street & the Health Policy Team. Funded from NIHR

#### CHE Publications August - October 2011

Basu A, **Manca A**. Regression estimators for generic health-related quality of life and quality-adjusted life years. *Medical Decision Making* 2011;doi:10.177/027298 9X11416988

**Bojke L, Epstein D**, Craig D, Rodgers M, Woolacott N, Yang H, **Sculpher M**. Modelling the cost-effectiveness of biologic treatments for psoriatic arthritis. *Rheumatology* 2011;50:iv39-iv47.

Cabieses B, **Espinoza M**. Translational research and its contribution to the decision making process in health policies (in Spanish) *Rev Peru Med Exp Salud Publica* 2011;28(2):299-97.

Cabieses B, **Espinoza M**, Zitko P. How to face the increased prevalence of individual health-risk behaviours in Chile (letter) (in Spanish). *Rev Med Chile* 2011;139:686-88.

Cabieses B, Zitko P, Pinedo R, Albor C, **Espinoza M**. How has social status been measured in health research? A review of the international literature (in Spanish). *Rev Panam Salud Publica* 2011;29(6):457-68.

**Epstein D,** Sutton A. Modelling correlated clinical outcomes in health technology appraisal. *Value in Health* 2011;14(6):793-799.

**Espinoza M.** Economic evaluation in Health Care in Chile: towards a broader framework (letter) (in Spanish). *Rev Méd Chile* 2011;139:816-19.

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Fleetcroft R, **Cookson R**, Steel N, Howe A. Correlation between prescribing quality and pharmaceutical costs in English primary care: national cross-sectional analysis. *British Journal of General Practice* 2011;60:554-55.

**Gravelle H**, Hole AR, **Santos R**. Measuring and testing for gender discrimination in physician pay:English family doctors. *Journal of Health Economics* 2011;30(4):660-74.

**Griffin S, Claxton K**. Analysing uncertainty in cost-effectiveness for decision making. In: Glied S, Smith PC, editors. *Oxford handbook of health economics*. Oxford: Oxford University Press;2011.

Hassink, WHJ, Van den Berg, B. Timebound opportunity costs of informal care: Consequences for access to professional care, caregiver support, and labour supply estimates. *Social Science & Medicine*; doi:10.1016/j. socscimed.2011.08.027

Jones AM, Rice N, Robone S, Rosa-Dias P. Inequality and polarisation in health systems' responsiveness: a cross-country analysis. *Journal of Health Economics* 2011;30(4):616-25.

Jones AM, **Rice N, Rosa Dias P.** Long-term effects of cognitive skills, social adjustment and schooling on health and lifestyle: Evidence from a reform of selective schooling. *Journal of Human Capital* 2011;5(3):342-76

Kolosa K, **Manca A,** Schubert S. A review of Health Technology Assessment (HTA) recommendations for drug therapies issued between 2007 and 2009 and their impact on policy making processes in Poland. *Health Policy* 2011;doi:10.1016/j. healthpol.2011.05.001

Manca A, Asseburg C, Bravo-Vergel Y, Seymour MT, Meade A, Stephens R, Parmar M, Sculpher MJ. The cost-effectiveness of different chemotherapy strategies for patients with poor prognosis advanced colorectal cancer (MRC FOCUS). Value in Health 2011;DOI:10.1016/j.jval.2011.07.008

Mandalà M, Imberti G, Piazzalunga D, Belfiglio M, Di Biagio K, **Robone S**, Labianca R, Marchesi L, Merelli B, Poletti P, Milesi A, Milesi L, Tondini C. Socio-economic status and education grade influence Breslow thickness, disease free and overall survival in clinical stage I-II AJCC skin melanoma: outcome analysis from a single institution experience. *Mayo Clinic Proceedings* 2011;16(2).

Maynard A, **Street A**, Hunter R. Using "payment by results" to fund the treatment of dependent drug users - proceed with care! *Addiction* 2011;DOI:10.1111/j.1360-0443.2011.03503.x.

McKenna C, Claxton K. Addressing adoption and research design decisions simultaneously: the role of value of sample information analysis. *Medical Decision Making* 2011;March 10; doi: 10.1177/0272989X11399921.

Paulden M, Claxton K. Budget allocation and the revealed social rate of time preference for health. *Health Economics* 2011;DOI:10.1002/hec.1730

**Rice N, Robone S,** Smith PC. Analysis of the validity of the vignette approach to correct for heterogeneity in reporting health system responsiveness. *The European Journal of Health Economics* 2011;12(2):141-62.

**Robone S,** Jones AM, **Rice N**. Contractual conditions, working conditions, health and well-being in the British Household Panel Survey. *The European Journal of Health Economics* 2011;12(5):429-44.

**Robone S, Rice N,** Smith P. Health systems` responsiveness and its characteristics: a cross-country comparative analysis. *Health Services Research* 2011; doi:10.1111/j.1475-6773.2011.01291.x

Wasi N, Van den Berg B, Buchmueller T. Heterogeneous effects of child disability on maternal labor supply: evidence from the 2000 US census. *Labour Economics* 2011;doi:10.1016/j.labeco.2011.09.008

#### Latest CHE Research Papers

CHERP 65 Does better disease management in primary care reduce hospital costs? - Mark Dusheiko, Hugh Gravelle, Stephen Martin, Nigel Rice and Peter C Smith

CHERP 66 Does hospital competition harm equity? Evidence from the English National Health Service - **Richard Cookson**, Mauro Laudicella and Paolo Li Donni

CHERP 67 Measuring change in health care equity using small area administrative data evidence from the English NHS 2001-8 - Richard Cookson, Mauro Laudicella and Paolo Li Donni www

CHERP 68 Truly inefficient or providing better quality of care? Analysing the relationship between risk-adjusted hospital costs and patients' health outcomes - Nils Gutacker, Chris Bojke, Silvio Daidone, Nancy Devlin, David Parkin and Andrew Street

CHERP 69 Uncertainty, evidence and irrecoverable costs: informing approval, pricing and research decisions for health technologies - Karl Claxton, Stephen Palmer, Louise Longworth, Laura Bojke, Susan Griffin, Claire McKenna, Marta Soares, Eldon Spackman and Jihee Youn

CHERP 70 NICE's social value judgements about equity in health and health care - Koonal K Shah, **Richard Cookson, Anthony J. Culyer** and Peter Littlejohns

