



Centre For Health Economics

Health Economics News

issue 15 • September 2012
www.york.ac.uk/che

Welcome to the CHE Newsletter

If you are viewing this newsletter electronically and would like further details on particular topics, click on the icon marked www, or if reading from a hard copy go to our website www.york.ac.uk/che/publications

inside this issue...

2 *English hospitals can do better*

2 *Measuring productivity in the health care sector*

2 *Assessing the effectiveness of accident prevention interventions using new methods*

3

- Staff news
- Presentations
- New funding
- Courses

4 *Publications*



Does it matter where your dentist trained?

Researcher: Martin Chalkley

The NHS, like most health care systems around the world, relies on migrant health workers – those trained overseas but working in the UK.

The very large flows of health workers across national boundaries have been commented on by the World Health Organization and OECD, and give rise to concerns about the stability of the health care workforce. But patients might be more concerned that standards and training vary across different jurisdictions and that this will affect the treatment they get. This study focuses on dentists who are providing services in the NHS in Scotland, having trained overseas. This group is good to study because very detailed records of the treatment that each and every dentist supplies are meticulously recorded - this is often not the case for other medical treatments. We find that, whereas when they first start practising in the NHS there are some significant differences in the treatment supplied by overseas dentists relative to their UK-trained counterparts, these differences have effectively disappeared by the time they have practised for six months. So where your dentist trained may affect the treatment you receive if they are new to the NHS, but after a relatively short time differences disappear. What we cannot tell in a study such as this is whether any of the short-term differences in treatment are good or bad; that is a question for on-going research.

Full report can be found in the JHSRP www.jhsrp.org

Alan Williams Fellowship

Congratulations to Line Kongstad who has been awarded the Alan Williams Fellowship and will be visiting CHE from 1 November 2012 - 28 February 2013. Line Kongstad is a PhD student from COHERE - Centre of Health Economics Research, Department of Business and Economics, University of Southern Denmark. Line's main field of research is hospital reimbursement schemes and the primary focus of her research project is 'Problems associated with reimbursing hospitals - do highly specialised units comprise systematically higher costs?'. During her visit Line will collaborate with researchers to produce a discrete piece of research suitable for submission to a peer-reviewed academic journal.

English hospitals can do better

Research team: James Gaughan, Anne Mason, Andrew Street and Padraic Ward



With the NHS facing severe funding constraints, it has been suggested that the greatest potential savings may come from increasing efficiencies and by reducing variations in clinical practices. When comparing hospitals, variations in practice of any form are often cited as evidence of inefficiency or poor performance. We assessed whether or not higher costs or longer lengths of stay are due to the type of patients that hospitals treat.

For ten conditions, we examined the cost and length of stay for every patient admitted to English hospitals during 2007/8. We included 3 medical conditions (acute myocardial infarction; childbirth; stroke) and 7 surgical treatments (appendectomy; breast cancer (mastectomy); coronary artery bypass graft; cholecystectomy; inguinal hernia repair; hip replacement; and knee replacement).

Even after taking account of age, severity of the condition and other characteristics, patients in some hospitals still had substantially higher costs or longer length of stay than others. These differences could not be explained by hospital characteristics such as size, teaching status, and how specialised the hospital was.

The findings suggest that most hospitals have scope to make efficiency savings in at least one of the clinical areas considered by this study. Inexplicable higher costs or lengths of stay suggest room for improvement and unless hospitals improve their use of resources, they could struggle financially.

Full report can be found at www.che.ac.uk

Measuring productivity in the health care sector

Research team: Adriana Castelli, Chris Bojke, Silvio Daidone and Nils Gutacker

CHE's research on measuring outputs, inputs and productivity of the English healthcare system has received some recent national and international attention as other countries also seek ways of monitoring what is gained for the resources invested. Dr Mieko Fujisawa from the Japanese Government (Japanese System of National Accounts) and the Tokyo Institute of Technology (Department of Social Engineering) visited CHE to discuss the methodology used in our research.

Four members of the Swedish National Board of Health and Welfare (Department of Statistics, Monitoring and Evaluation, Efficiency and Quality Studies) also visited CHE to discuss work on the measurement of productivity of the English NHS, efficiency analysis and the work on quality measurements (PROMs). Team members also presented work at an invited seminar organised by the OECD in the Hague, featuring delegates from 18 countries, explaining the method by which the CHE research adjusts hospital output for quality.

Staff from the Office for National Statistics (ONS) have also recently visited CHE in order to learn more about the measurement of NHS productivity which informs the ONS national estimates of productivity across the public sector.

Assessing the effectiveness of accident prevention interventions using new methods

Researchers: Pedro Saramago (CHE), Nicola Cooper (Leicester), Alex Sutton (Leicester) and Andrea Manca (CHE)

Researchers from CHE and the Department of Health Sciences from the University of Leicester have been exploring the effectiveness of interventions to increase the prevalence of smoke alarms in households with children. An array of interventions were evaluated using different methods and types of data. Using summary aggregate information from the trials suggested that interventions that were more 'intensive' (i.e. providing equipment (with or without fitting), home inspection, or both, in addition to education) generally were more effective. The availability of data at the level of the individual for some studies, allowed novel methods to be used. By successfully accounting for patient characteristics, the new model provided a better reflection of parameters' uncertainty and more accurate treatment-covariate associations, compared to synthesising aggregate data only; useful to adequately inform subgroup cost effectiveness analysis. We concluded that including evidence at the individual level is desirable, even when individual patient data is available only for a fraction of the studies.



CHE researchers have recently extended this work to explore methods for using the synthesis of individual patient data in cost effectiveness analysis. Please watch out for further development in future CHE newsletters.

For further information: Applied work www.che.ac.uk Methods work www.che.ac.uk

Staff news

Rowena Jacobs has been appointed to the Council of Governors for York Teaching Hospital NHS Foundation Trust. The governors represent the interests of the Trust members and



stakeholder organizations, such as the PCT, Local Authority, University and other partnership organizations in the local health economy in the governance of the NHS Foundation Trust.

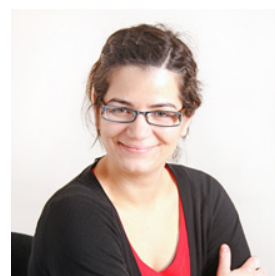
Congratulations to **Manuel Espinoza** on winning a Research Presentation Podium Award at the ISPOR 17th Annual International Meeting held on 2-6 June 2012 in Washington, USA. His paper was entitled "Individual decisions and social value: a conceptual framework to explore alternative decision



making approaches and the value of heterogeneity in the era of individualized care" and was selected as best student podium presentation.

Details of the presentation can be found here [www](#)

Marta Soares has been appointed as a member of the Technology Appraisal Committee of the National Institute for Health and Clinical Excellence for three years.



Conference and workshop presentations

Between 15-18 of May, **Eugenio Zucchelli** attended the Conference of the Spanish Health Economics Association in Bilbao where he presented the paper "Do smoking bans have an impact on active smoking?" (co-authored with Andrew M Jones, Audrey Laporte, Nigel Rice). Eugenio also discussed a paper at the same conference.

Various members of staff including **Susan Griffin, Andrew Street, Dan Howdon, Ronan Mahon, Irene Sanchez, James Gaughan, Adriana Castelli, Padraic Ward, Nils Gutacker, Miqdad Asaria, Mark Dusheiko, Roy Carr-Hill and Aurora Ortiz-Nuñez** attended the Health Economists' Study Group summer meeting in Oxford.

In June **Mark Sculpher** presented a paper entitled 'Economics agenda for development of effective personalized medicine strategies: value of information' at the First Annual Health Economics and Personalised Medicine Conference hosted by Centre for Public Health Research in Luxembourg. In the same month he presented a paper entitled 'Value based pricing for prescription drugs: defining a scheme to align the incentives of payers, manufacturers and prescribers' at the 11th National Conference of the Association of Italian Health Economists.

Tony Culyer has been reappointed as Ontario Research Chair in Health Policy & System Design at the University of Toronto, Canada.

Maria Goddard gave an invited seminar on financial incentives in health at the World Health Organisation in Geneva on June 13th as part of the Global Health Histories series. She participated as a panel member in the mentoring event organised by the Women's Committee of the Royal Economics Society held at York University on 16-17 July that brought together female economists to provide career advice and support.

The 2012 European Conference of Health Economics (ECHE) was held at the University of Zurich, and was attended by 780 delegates from 53 countries. Ten people from CHE spoke at the conference: **Chris Bojke, Silvio Daidone, Mike Drummond, Mark Dusheiko, Nils Gutacker, Anne Mason, Laure de Preux, Andrew Street, Helen Weatherly and Eugenio Zucchelli**. The CHE presentations covered a range of topics, including physician performance and physician costs; analyses of hospitals' finance, efficiency and outcomes; methodological challenges for evaluating long-term care; and dynamic models of smoking and addiction.

In June, **Mike Drummond** was involved in the 17th Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research held in Washington DC. He had roles as a moderator, panellist, speaker and discussion leader.

New funding

Bernard van den Berg (in conjunction with the Centre for Housing Policy, University of York) received funding from the Welsh Assembly to look at the impact of the Supporting People programme which is a flexible and diverse range of services offered to groups including the elderly, homeless families and people with alcohol or drug problems. The services aim to enhance independent living and potentially to substitute for utilisation of more expensive health and social care services. CHE's role was to provide a framework to evaluate the costs and effects of this programme and findings will be published later in the year.

Courses and workshops

Introduction to measuring efficiency in public sector organisations: analytical techniques and policy 6-19 October 2012. Further details: [www](#)

Bron S, Dietrich M, **Ortiz-Nuñez A**, Taylor K. Business ownership and attitudes towards risk. *Applied Economics* 2013;45(13):1731-40.

Chuang LH, **Soares MO**, Tilbrook H, Cox H, Hewitt CE, Aplin J, Semlyen A, Trehwela A, Watt I, Torgerson D. A pragmatic multi-centered randomised controlled trial of yoga for chronic low back pain: economic evaluation. *Spine* 2012;doi: 10.1097/BRS.0b013e3182545937.

Conigliani C, **Manca A**, Tancredi A. Statistical methods for health care economic evaluation. In: Faltin F, Kenett R, Ruggeri F, editors. *Statistical methods in healthcare*. Wiley; 2012:Chapter 18.

Costa-Font J, Karlsson M, **Van den Berg B**. Redesigning long-term care finance and delivery. *Applied Economic Perspectives and Policy* 2012;34(2):215-19.

Drummond M, Neumann P, Jonsson B, Luce B, Schwartz J, Siebert U, Sullivan S. Can we reliably benchmark health technology assessment organizations? *International Journal of Technology Assessment in Health Care* 2012;28(2):159-65.

Dumville JC, **Soares MO**, O'Meara S, Cullum N. Systematic review and mixed treatment comparison: Dressings to heal diabetic foot ulcers. *Diabetologia* 2012;DOI:10.1007/s00125-012-2558-5.

Fleetcroft R, Steel N, **Cookson R, Walker S**, Howe A. Incentive payments are not related to expected health gain in the pay for performance scheme for UK primary care: cross-sectional analysis. *BMC Health Services Research* 2012;12(94).

Gaughan J, Kobel C, Linhart C, **Mason A, Street A, Ward P**. Why do patients having coronary artery bypass grafts have different costs or length of stay? An analysis across ten European countries. *Health Economics* 2012;S21:77-89.

Howdon D. Time and chance happen to them all? Duration modelling versus lifetime incidence of cancer. Health Economics and Data Group (HEDG), *University of York* 2012;working paper 12/06. 2012.

Kontopantelis E, Doran T, **Gravelle H**, Siciliani L, Sutton M, Goudie R. Pay-for-performance and influenza immunization: the impact of raising the bar in the UK Quality and Outcomes Framework. *Health Services Research* 2012;47(3, part 1):1117-36.

Laudicella M, Siciliani L, **Cookson R**. Waiting times and socioeconomic status: evidence

from England. *Social Science and Medicine* 2012;74(9):1331-1341

Mason A, Or Z, Renaud T, **Street A**, Thuilliez J, **Ward P**. How well do DRGs for appendectomy explain variations in resource use? An analysis of patient-level data from 10 European countries. *Health Economics* 2012;S21:20-40.

McKenna C, Wade R, **Faria R**, Yang H, Stirk L, Gummerson N, **Sculpher M**, Woolacott N. EOS 2D/3D X-ray imaging system: a systematic review and economic evaluation. *Health Technology Assessment* 2012;16(14):1-188.

McKenna C, Walker S, Lorgelly P, Fenwick E, Burch J, Suekarran S, Bakhai A, Witte K, Harden M, Wright K, Woolacott N, **Palmer S**. Cost-effectiveness of aldosterone antagonists for the treatment of post-myocardial infarction heart failure. *Value in Health* 2012;15(3).

Miraldo M, **Siciliani L, Street A**. Price adjustment in the hospital sector, Reply *Journal of Health Economics* 2012;31(1):323-25.

Rodgers M, **Asaria M, Walker S**, McMillan D, Luccock M, Harden M, **Palmer S**, Eastwood A. The clinical effectiveness and cost-effectiveness of low-intensity psychological interventions for the secondary prevention of relapse after depression: a systematic review. *Health Technology Assessment* 2012;16(28):1-129.

Saramago P, Manca A, Sutton AJ. Deriving input parameters for cost-effectiveness modelling: taxonomy of data types and approaches to their statistical synthesis. *Value in Health* 2012;doi:10.1016/j.jval.2012.02.009

Soares MO. Is the QALY blind, deaf and dumb to equity? NICE's considerations over equity. *British Medical Bulletin* 2012;101(1):17-31.

Street A, Kobel C, Renaud T, Thuilliez J. How well do Diagnosis Related Groups explain variations in costs or length of stay among patients and across hospitals? Methods for analysing routine patient data. *Health Economics* 2012;S21:6-18.

Towse A, **Drummond MF**, Sorenson C. Measuring value:pharmacoeconomics theory and practice. In: Danzon P, Nicholson S, editors. *The Oxford handbook of the economics of the pharmaceutical industry*. Oxford: Oxford University Press; 2012. p.394-437.

Van den Berg B. SF-6D population norms. *Health Economics* 2012;DOI:10.1002/hec.1823.

Walker S, Sculpher M, Claxton K, Palmer S. Coverage with evidence development, only in research, risk sharing, or patient access scheme? A framework for coverage decisions. *Value in Health* 2012;DOI:10.1016/j.val.2011.12.013

Zucchelli E, Jones AM, **Rice N**. The evaluation of health policies through dynamic microsimulation methods. *International Journal of Microsimulation* 2012;5(1):2-20.

Latest CHE Research Papers

CHERP 78

English hospitals can improve their use of resources: an analysis of costs and length of stay for ten treatments - **James Gaughan, Anne Mason, Andrew Street and Padraic Ward** [www](http://www.york.ac.uk/che)

CHERP 79

Well-being and psychological consequences of temporary contracts: the case of younger Italian employees - Vincenzo Carrieri, Cinzia Di Novi, **Rowena Jacobs and Silvana Robone** [www](http://www.york.ac.uk/che)

CHE's Annual Report

The CHE annual report is available to download from our website

