



Centre For Health Economics

Health Economics News

issue 27 • November 2016
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

Follow us on  and 

inside this issue...

2 *Update: Mirror, mirror on the wall – whose local NHS is fairest of them all?*

2 *Competition policy in the EU*

2 *Millions Saved: Collaborations between CHE and the Center for Global Development*

2 *Counting the cost of mental health*

3 *Latest news*

4 *Publications*



Costs and benefits associated with interventions to improve air quality

Project team: Laura Bojke, James Lomas, Gerry Richardson

Air quality has an enormous impact on length and quality of life; there are 29,000 deaths each year in the UK associated with poor air quality from particulate matter alone, with a similar number of deaths thought to be associated with exposure to nitrogen dioxide. Interventions to improve air quality are therefore potentially important and should be evaluated in order to assess their value for money.

A collaboration between local authorities and academics at CHE explored the issue of air quality and how local health may be improved by changes to the transport system. The research applied the same framework used in Health Technology Assessment (HTA) to the assessment of air quality. Currently, evaluations of air quality interventions may understate the impact on quality of life and costs and be less influential for decision makers because they are not evaluated using the same process applied to other health interventions.

This work has culminated in the design of a toolkit that produces estimates of both the health effects and the cost to the NHS of reductions in transport-related pollutant emissions. It increases awareness of the health economic case for air quality improving interventions and provides a simple-to-use tool for comparing transport interventions against each other and also against other demands on local budgets.

The toolkit can be found here: www.york.ac.uk/che/publications

The Centre for Health Economics (CHE) offers a programme of short courses and workshops in health economics for members of the field, including health economists, health care professionals and students. [More details here](#)



Update: Mirror, mirror on the wall – whose local NHS is fairest of them all?

Project team: Richard Cookson, Miqdad Asaria, Shehzad Ali

Indicators of how well your local NHS is tackling health inequality have been launched by NHS England. The indicators are based on methods developed by Richard Cookson, Miqdad Asaria and Shehzad Ali in the NIHR-funded research project described previously in the CHE Annual Report 2015. Full details can be found on our [equity indicators project website](#), including our [CCG health equity tool](#) which allows you to draw graphs showing social inequality in potentially avoidable hospitalisations in your local NHS area compared with similar local NHS areas. Watch this space, as NHS England plans to update the indicators quarterly – so it will soon be possible to start finding out how far new local models of care are succeeding in reducing costly emergency hospitalisations linked to social deprivation.



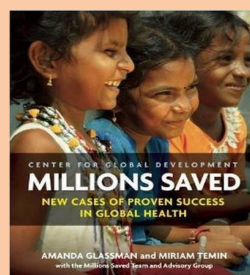
Competition policy in the EU

As part of a project funded by the [Health Foundation](#), Luigi Siciliani, Martin Chalkley and Hugh Gravelle organised a Conference on Competition Policy in five European countries which was held earlier this year at the Health Foundation, London. The conference was attended by a combination of academic researchers and health policy makers from the UK, Norway, Portugal, France, the Netherlands and Germany. The academic participants had been commissioned to write articles detailing recent changes in competition policy in the health care sectors of their respective countries. The papers presented at the conference will be published in a special issue of the journal 'Health Policy'.

Millions Saved: Collaborations between CHE and the Center for Global Development

Andrew Mirelman

This year the think tank, the Center for Global Development (CGD) released its third edition of the global health textbook 'Millions Saved: New Cases of Proven Success in Global Health'. This edition features contributions from Andrew Mirelman who developed quantitative estimates of disease burden and costs for 12 of the 18 featured case studies. The selection of cases included was different than in previous editions as all of the examples had to show success at scale in their respective countries. Cases included examples such as: the partnership to develop and deliver a low-cost vaccine for the Neisseria meningitidis group A (MenAfriVac) in Chad; and the implementation of tobacco control measures in Thailand that prevented 30,000 deaths and also provided critical national revenue generation.



In September, Andrew presented his research at the first annual 'What Works Global Summit', a conference hosted by the Campbell Collaboration and the International Initiative for Impact Evaluation (3ie). The panel featured presentations from: CGD's vice president of programs and director of global health - Amanda Glassman; CGD senior policy analyst - Rachel Silverman; and scientific director of the Armauer Hansen Research Institute, Ethiopia - Abraham Assefa.

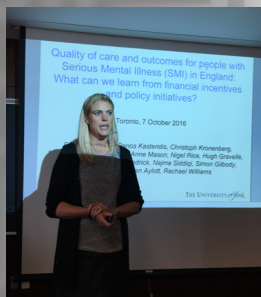
Link to the CGD Working Paper [www](#) and the Millions Saved 3rd Edition book [www](#)

Counting the cost of mental health

Project team: Rowena Jacobs, Martin Chalkley, María José Aragón (CHE), Jan R Böhnke, Simon Gilbody (HYMS and Department of Health Sciences, University of York) Mike Clark (PSSRU, London School of Economics) Valerie Moran (Department of Health Services Research and Policy, London School of Hygiene and Tropical Medicine).

The NHS spends 13% of its £101 billion budget on mental health care and it is important that this funding is spent in the most effective way. Existing arrangements largely set budgets without linking them to treatment activity or its results, but there has been a drive towards funding according to the number and types of treatment that are undertaken.

Any such funding system depends on reliable and appropriate measures of activity and the aim of this research was to assess the fitness for purpose of mental health 'cluster episodes'. Patients are classified into 21 clusters, according to their mental health needs. Once assigned to a cluster a patient undergoes treatment for a period of time – the episode.



We found that there was substantial variation between mental health Trusts, both in terms of the treatment that patients within a cluster received and in the length of the episode. This has implications for the financing system because it suggests that it will be difficult to 'price' mental health treatment

using the available classification system. Therefore, the existing classification system needs refinements; abandoning the system altogether would risk disinvestment in mental health services as the funding would not necessarily 'match' the services provided.

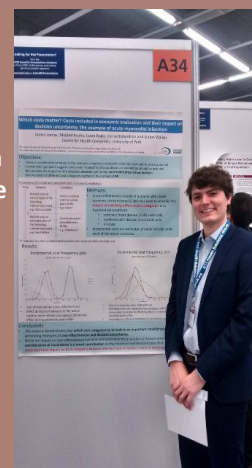
Further Details here: [www](#)

CHE at ISPOR Europe 2016, Vienna

James Lomas (pictured) and Eleftherios Sideris

CHE contributed significantly to the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 19th European Annual Congress in Vienna (29 October-2 November 2016). Eleven CHE researchers were on the conference programme, delivering short courses, participating in issue panels and forums, presenting workshops and delivering poster presentations.

Mark Sculpher, Andrea Manca and Mike Drummond contributed to issue panels on the use of real world data, patient reported outcomes and medical devices, and biosimilars, respectively. Beth Woods and Noemi Kreif taught in short courses on the development of conceptual models and on addressing selection bias, respectively. Claire Rothery and David Glynn presented a workshop on the use of value of information analysis in health technology assessment. CHE research on NHS health checks, model conceptualisation and, costing approaches in economic evaluation was also presented during poster sessions. Full details can be found in the ISPOR 19th European Annual Congress Programme. www.ispor.org



Latest news

In July, **Hyacinthe Kankeu** made an oral presentation at the 9th International AIDS Economics Network Pre-Conference in Durban South Africa entitled 'How do supply side factors influence informal payments for healthcare? The case of HIV patients in Cameroon'.

A number of CHE staff attended and presented at the EUHEA conference 2016 held in July at the Hamburg Center for Health Economics (HCHE).

In July, CHE welcomed the 2016 cohort of Overseas Development Institute (ODI) Health Fellows to York for a repeat of last year's successful training day. It was the final day of their intensive briefing week ahead of starting their placements with Ministries of Health in a number of low- and middle-income countries including Ethiopia, Ghana, Malawi, Nigeria and Thailand. We have since heard that we topped the list of activities they found most useful and interesting. We are now submitting an ESRC Impact Acceleration Award application jointly with ODI support.

John Tayu Lee, from Saw Swee Hock School of Public Health, Singapore, was awarded an Alan Williams Fellowship to visit CHE and undertake collaborative research with **Marc Suhrcke**.

Academics from the University of York have helped develop a healthcare package 'Delivering affordable healthcare in sub-Saharan Africa', which has the potential to be used as a blueprint for other developing countries. **Paul Revill, Jessica Ochalek, Karl Claxton, Mark Sculpher, Alex Rollinger.**

Nils Gutacker gave a keynote speech entitled 'Using PROMs to incentivise performance - A cautionary tale from the English NHS' at the ISOQOL 2016 conference in Copenhagen in October.

In October **Andrea Manca** participated in the FORUM meeting on 'Health economics for stratified medicine' organised by the Academy of Medical Science. At the 3rd International Conference on Multiple Myeloma in Milan organised by the European School of Haematology, he gave a special lecture entitled 'Cost-effectiveness analysis to inform health technology assessment considerations in haematological oncology'. He also gave a talk 'NICE or Nasty? Reflections of a health economist serving on the technology appraisal committee' at the York Haematological Support Group. Later in October he gave an Invited talk to the European Commission's Committee for Orphan Medicinal Products (COMP) meeting on HTA of orphan drugs in Rome, Italy.

In October, **Rowena Jacobs** (pictured on page 2) gave an invited presentation entitled 'Quality of care and outcomes for people with serious mental illness (SMI) in England: What can we learn from financial incentives and policy initiatives?' at University of Toronto for their Mental Illness Awareness Week.

In October, **Andrew Mirelman** gave a seminar, 'Social protection and the double burden of malnutrition' to the School of Public Health and Family Medicine at the University of Cape Town in South Africa.

Maria Goddard was elected to the University of York Research Committee and **Laura Bojke** appointed as a member of University of York Academic Promotions Committee, both until 30 September 2019.

In September, **Andrew Street** (pictured middle below) gave the Plenary address 'Universal health coverage' at the Summer school in public health policy, economics and management, Università della Svizzera italiana, Lugano, Switzerland. On 13 September, Andrew appeared as an expert witness before the House of Lords Sustainability Committee giving evidence about aspects of financing and productivity in the NHS, now and in the future. During October Andrew visited Australia giving various talks and workshops.



New funding

Providers' response on the pay for performance incentives

Katja Grasic

Funder: NIHR Doctoral Fellowship
Oct 2016 to Sept 2019

Evaluating the cost-effectiveness of the best practice tariff for hip fracture

Katja Grasic, Nils Gutacker, Andrew Street

Funder: NHS England
Jan 2016 to Dec 2017

Becker D, Chit A, DiazGranados C, Maschio M, Yau E, **Drummond M**. High-dose inactivated influenza vaccine is associated with cost savings and better outcomes compared to standard-dose inactivated influenza vaccine in Canadian seniors. *Human Vaccines & Immunotherapeutics* 2016;doi:10.1080/21645515.2016.1215395.

Bojke C, Castelli A, Grasic K, Howdon D, Street A. Did NHS productivity increase under the Coalition government? In Exworthy M, Mannion R, Powell M. (eds) *Dismantling the NHS: Evaluating the Impact of Health Reforms*. Bristol (UK);Policy Press 2016;p65-86.

Burgers LT, Redekop W, Al MJ, Lhachimi SK, Armstrong N, **Walker SM, Rothery C**, et al. Cost-effectiveness analysis of new generation coronary CT scanners for difficult-to-image patients. *European Journal of Health Economics* 2016;doi:10.1007/s10198-016-0824-z.

Chiwaula L, **Revill P**, et al, for the Lablité Project Team. Measuring and valuing informal care for economic evaluations of HIV/AIDS interventions: methods and application in Malawi. *Value in Health Regional Issues* 2016;doi.org/10.1016/j.vhri.2016.08.002.

Corbacho Martin MB, **Duarte A**, et al. Cost effectiveness of surgical versus non-surgical treatment of adults with displaced fractures of the proximal humerus: economic evaluation alongside the PROFHER trial. *Bone and Joint Journal* 2016;98B(2):152-159.

Cullum N, Buckley H, Dumville J, Hall J, Lamb K, Madden M, Morley R, O'Meara S, **Saramago P, Soares MO, Stubbs N**. Wounds research for patient benefit programme. Programme Grants for Applied Research. *NIHR Journals Library* 2016;4(13).

Drummond MF. Clinical Guidelines: a NICE way to introduce cost-effectiveness considerations? *Value in Health* 2016; 19(5):525-530.

Drummond M, Tarricone R, Torbica A. Incentivizing research into the effectiveness of medical devices. *European Journal of Health Economics* 2016;17(9):1055-1058.

Faria R, Woods B, Griffin S, Palmer S, Sculpher M, Ryder SD. Prevention of progression to cirrhosis in hepatitis C with fibrosis: effectiveness and cost effectiveness of sequential therapy with new direct-acting antivirals. *Alimentary Pharmacology & Therapeutics* 2016;44(8):866-876.

Goddard M, Mason A. Integrated care: a pill for all ills?. *International Journal of Health Policy and Management* 2016;doi:10.15171/ijhpm.2016.111.

Greenwood JP, Ripley DP, Berry C, et al, **Sculpher M, Walker S**, et al, for the CE-MARC 2 Investigators. Effect of care guided by cardiovascular magnetic resonance, myocardial perfusion scintigraphy, or NICE guidelines on subsequent unnecessary angiography rates -

The CE-MARC 2 Randomized Clinical Trial. *JAMA* 2016;316(10):1051-1060.

Grieve R, Abrams K, **Claxton K, Sculpher M**, et al. Cancer Drugs Fund requires further reform: reliance on "real world" observational data undermines evidence base for clinical practice. *BMJ* 2016;354:i5090.

Gutacker N, Siciliani L, Moscelli G, Gravelle H. Choice of hospital: which type of quality matters? *Journal of Health Economics* 2016;doi:10.1016/j.jhealeco.2016.08.001.

Hinde S, Epstein D, Cook A, Embleton A, Perren TJ, **Sculpher MJ**. The cost-effectiveness of Bevacizumab in advanced ovarian cancer using evidence from the ICON7 trial. *Value in Health* 2016;19(4):431-439.

Llewellyn A, **Faria R, Woods B**, Simmonds M, **Lomas J**, Woolacott N, **Griffin S**. Daclatasvir for the treatment of chronic hepatitis C: a critique of the clinical and economic evidence. *PharmacoEconomics* 2016;34(10):981-992.

Lomas J, Llewellyn A, **Soares M**, Simmonds M, Wright K, Eastwood A, **Palmer S**. The clinical and cost effectiveness of Vortioxetine for the treatment of a major depressive episode in patients with failed prior antidepressant therapy: a critique of the evidence. *PharmacoEconomics* 2016; 34(9):901-912.

Malone DC, Berg NS, **Claxton K**, Garrison LP, IJzerman M, Marsh K, Neumann PJ, **Sculpher M**, et al. International Society for Pharmacoeconomics and Outcomes Research comments on the American Society of Clinical Oncology value framework. *Journal of Clinical Oncology* 2016;doi:10.1200/JCO.2015.64.4328.

Mann R, Beresford B, Parker G, Rabiee P, **Weatherly H, Faria R**, et al. Models of reablement evaluation (MoRE): a study protocol of a quasi-experimental mixed methods evaluation of reablement services in England. *BMC Health Services Research* 2016;16:375.

Mealing S, **Woods B**, Hawkins N, Cowie M, Plummer C, Abraham W, Beshai J, Klein H, **Sculpher M**. Cost-effectiveness of implantable cardiac devices in patients with systolic heart failure. *Heart* 2016;102(21):1742-1749.

Moscelli G, Siciliani L, **Gutacker N, Gravelle H**. Location, quality and choice of hospital: evidence from England 2002-2013. *Regional Science and Urban Economics* 2016;60:112-124.

Moscelli G, Siciliani L, Tonei V. Do waiting times affect health outcomes? Evidence from coronary bypass. *Social Science and Medicine* 2016;161:151-159.

Obure CD, **Jacobs R**, et al. Does integration of HIV and sexual and reproductive health services improve technical efficiency in Kenya and Swaziland? An application of a two-stage semi parametric approach incorporating quality measures. *Social Science & Medicine* 2016;151:147-156.

Phillips A, Cambiano V, Nakagawa F, et al, **Revill P**. Point-of-care viral load testing for sub-Saharan Africa: informing a target product profile. *Open Forum Infectious Diseases* 2016;doi:10.1093/ofid/ofw161.

Rencz F, Gulacsi L, **Drummond M**, et al. EQ-5D in Central and Eastern Europe: 2000-2015. *Quality of Life Research* 2016;25(11):2693-1710.

Robson M, **Asaria M, Cookson R**, Tsuchiya A, Ali S. Eliciting the Level of Health Inequality Aversion in England. *Health Economics* 2016;doi:10.1002/hec.3430.

Rodgers M, Dalton J, Harden M, **Street A**, Parker G, Eastwood A. Integrated care to address the physical health needs of people with severe mental illness: a rapid review. *Health Services and Delivery Research* 2016;4(13).

Sanders GD, Neumann PJ, Basu A, Brock DW, Feeny D, Krahn M, Kuntz KM, Meltzer DO, Owens DK, Prosser LA, Salomon JA, **Sculpher MJ**, et al. Recommendations for conduct, methodological practices, and reporting of cost-effectiveness analyses: second panel on cost effectiveness in health and medicine. *JAMA* 2016;316(10):1093-1103.

Sideris E, Corbett M, **Palmer S**, Woolacott N, **Bojke L**. The clinical and cost effectiveness of Apremilast for treating active psoriatic arthritis: a critique of the evidence. *Pharmacoeconomics* 2016;34(11):1101-1110.

Spiers GF, Allgar VL, **Richardson G**, Thurland K, **Hinde S**, et al. Transforming community health services for children and young people who are ill: a quasi-experimental evaluation. *Health Services and Delivery Research* 2016;4(25).

Latest CHE research papers

CHERP 132 Years of good life based on income and health: re-engineering cost-benefit analysis to examine policy impacts on wellbeing and distributive justice.

CHERP 133 Delayed discharges and hospital type: evidence from the English NHS.

CHERP 134 The impact of diabetes on labour market outcomes in Mexico: a panel data and biomarker analysis.

CHERP 135 Fairer decisions, better health for all: health equity and cost-effectiveness analysis.

CHERP 136 Supporting the development of an essential health package: principles and initial assessment for Malawi.

CHERP 137 Funding of mental health services: do available data support episodic payment?

CHERP 138 Hospital productivity growth in the English NHS 2008/09 to 2013/14.

Free to download here: www.york.ac.uk/che