



Centre For Health Economics

Health Economics News

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Welcome to the CHE Newsletter

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The CHE Annual Report for 2016 was released in May 2017.



Congratulations to **Claire de Oliveira**, from the Centre for Addiction and Mental Health, Institute for Mental Health Policy Research, Toronto, Canada, who has been awarded an Alan Williams Fellowship. Researchers wishing to visit CHE are invited to apply during March/April of each year for a fellowship award which is intended as a contribution towards living and travel expenses. Claire will start her visit in October hosted by Rowena Jacobs.



Health aid crowds out domestic health expenditures – but can SWAPs help mitigate this?

Project team: Marc Suhrcke (CHE), Rohan Sweeney (Deakin University, Australia), Yun Joo Jeon (Ministry of Health, Singapore), Duncan Mortimer (Monash University, Australia)

Previous research has shown that an additional \$1 of health aid disbursed to low- and middle-income countries results in governments reducing their own health spending such that significantly less than an additional \$1 is spent on health – effectively making health aid fungible. From a recipient government perspective there may be good reasons (e.g. it could be a rational response to an increase in health aid when donor priorities do not match their own). However, there is concern among donors that the observed crowding-out of government health spending does not help close persisting financing gaps that prevent the provision of even a minimum package of essential health services in these poorest countries. We explore whether the extent to which domestic government health spending is crowded out is mediated by the way in which health aid is delivered. Specifically, we examine the ‘Sector Wide Approach’ (SWAp), a mechanism for delivering aid which, in contrast to more traditional project-based delivery, seeks to increase coordination between donors and recipient government and increase recipient ownership over their aid programme. We find that SWAPs exert a protective effect, and hence, the actual fungibility of health aid in practice may well depend on the mechanism for aid delivery.

For the full article see here [www](http://www.york.ac.uk/che/publications)

Note: this was a paper led by Rohan Sweeney, our Alan Williams' fellow last year.

A: Initial utility-maximising allocation by government on expenditures on the health sector vs non-health sector
I₁ and I₂: Government's indifference curve (reflecting the relative weight given to public investment in the health sector versus other sectors)
RR: Budget constraint
DAH: Direct delivery of aid specifically for the health sector, shifting budget constraint to the right; full additionality would entail an increase in funding for health by the full amount of the grant (a shift from point A to B)
C: New utility-maximising allocation of government expenditures after DAH payment

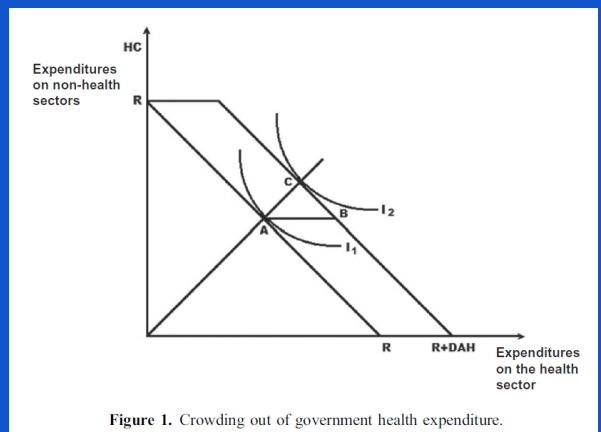


Figure 1. Crowding out of government health expenditure.

Full additionality would entail an increase in funding for health by the full amount of the grant (a shift from point A to B)

How should hospital reimbursement be refined to support concentration of complex care services?

Project team: Katja Grasic, Andrew Street (CHE), Chris Bojke (University of Leeds)

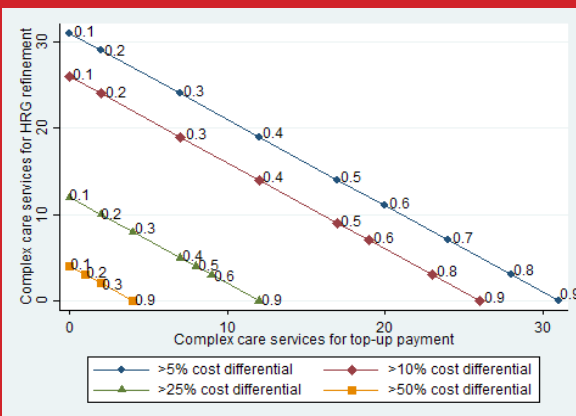
Patients with relatively rare and complex health care needs are often treated in a small number of specialised hospitals. Treatment for these patients is often more expensive, however, and the costs are not always properly reimbursed. Hospitals are paid using the so-called Healthcare Resource Groups (HRGs), which categorise patients into one of more than 2,000 HRG groups. Payment is made according to the average cost of treatment for all patients in a particular HRG across all hospitals. However, if the complex patients are concentrated in a few hospitals, those hospitals incur costs that are higher than the average and are consequently worse off.

Using 69 different indicators for complex care (Prescribed Specialised Services markers) we investigate whether - and by how much - complex patients cost more than other less severe patients in the same HRG group. We also calculate the concentration levels across hospitals for each of the indicators.

We propose changes to the HRG system for those indicators for which the cost difference between complex and non-complex patients is large and patients are concentrated within a few hospitals. When complex

patients are grouped into only a few HRGs, we propose refinements, so those complex patients are categorised in a separate HRG. When complex patients are grouped into many HRGs, top-up payment might be preferable.

The graph shows four lines indicating the number of complex care services with cost differentials between complex and non-complex patients in excess of 50%, 25%, 10%, and 5%. For each line, the number of complex care services considered for either refinement or top-up payments can be identified according to thresholds chosen for the two concentration measures (concentration across hospitals and concentration across HRGs).



Full paper can be accessed from here: www.royalsocietypublishing.org/doi/10.1098/rsos.170200

Local decision making

Project team: Seb Hinde, Laura Bojke, Gerry Richardson (CHE), Lise Retat, Laura Webber (UK Health)

Local healthcare decision makers, including those working within Clinical Commissioning Groups (CCGs) face a range of real-world constraints that may limit the impact of standard academic research. For example, decision makers typically work to shorter time lines, need to be aware of legal constraints, and often operate within a fixed (or even shrinking) budget. In order to improve the impact of academic work and enhance the consistency and transparency of local decision making, researchers at CHE have collaborated with decision makers at the Vale of York CCG. As part of this work, we have provided the CCG with short pieces of research on various subjects that meet the needs of the CCG. Examples of this work include an evaluation of expanding the provision of specialist rehabilitation services in the local area and an evaluation of the cost-effectiveness of health checks. Despite recent negative publicity around health checks, the latter study suggests that the proposed continuation of health checks is likely to be cost-effective.

Full details of this study are here www.royalsocietypublishing.org/doi/10.1098/rsos.170200
Details of other work around local decision making are here www.royalsocietypublishing.org/doi/10.1098/rsos.170200



Awards for CHE authors

Karl Claxton, Stephen Palmer, Louise Longworth, Laura Bojke, Susan Griffin, Marta Soares, Eldon Spackman and Claire Rothery were awarded ISPOR's 2017 Excellence in Methodology in Pharmacoeconomics and Health Outcomes Research Award for the paper 'A comprehensive algorithm for approval of health technologies with, without, or only in research: The key principles for informing coverage decisions' which was published in *Value in Health*. www.royalsocietypublishing.org/doi/10.1098/rsos.170200



Maria Goddard, Panagiotis Kasteridis, Rowena Jacobs, Rita Santos and Anne Mason are authors of the paper 'Bridging the gap: The impact of quality of primary care on duration of hospital stay for people with dementia' published in the *Journal of Integrated Care* which has been selected by the journal's editorial team as the Outstanding Paper in the 2017 Emerald Literati Network Awards for Excellence. www.royalsocietypublishing.org/doi/10.1098/rsos.170200



The National Institute for Health Research (NIHR) Research Methods Fellowships

The NIHR Research Methods Fellowships are aimed at talented individuals in their early post-graduate career or those looking to change the focus of their career. Edward Cox and Alessandro Grosso are CHE's first NIHR Research Methods Fellows:



"Having attained my BSc in Economics at Lancaster University, the NIHR Research Methods Fellowship offered me a unique opportunity to develop and focus my skill set towards health-related research. During my dedicated period at CHE, I have attained an MSc in Health Economics and have conducted analyses, reviews and reports relevant to economic evaluation. Being a NIHR Research Methods Fellow is extremely rewarding, with CHE providing a truly inclusive and collaborative research platform." Edward Cox

"The NIHR Research Methods Fellowship was a wonderful opportunity for me. Having just graduated in Economics from Bocconi University, I wished to focus more on health-related research. This position allowed me to get structured training through the courses delivered here in York whilst gaining experience in CHE's vibrant research environment. This included work across various branches of health economics while based in the Economic Evaluation and Health Technology Assessment team. It truly is a remarkable experience."

Alessandro Grosso

For more details about the fellowship see here



Selected news

Gerry Richardson has been appointed as the University representative to the York Teaching Hospital NHS Foundation Trust Council of Governors. Governors ensure that the best interests of the community are met by the hospital Trust.

Marc Suhrcke has been appointed by NHS Health Scotland to be part of the Evaluation Advisory Group, tasked to evaluate the operation and effect of the Minimum Unit Pricing as it was passed in the Alcohol (Minimum Pricing) (Scotland) Act in June 2012.

In April, **Mark Sculpher** spent some time in Japan where he participated in a symposium in Tokyo which considered the role of health technology assessment in setting pharmaceutical prices in Japan. He also taught a short course on economic evaluation and met senior politicians and civil servants.

Richard Cookson and **Andrew Mirelman** gave a presentation in Finse, Norway at an event hosted by the University of Bergen. Richard spoke about Distributional Cost-Effectiveness Analysis, and Andrew gave a talk about its application to low- and middle-income countries. They also conducted a breakout session DCEA exercise with all participants, which included economists, ethicists, philosophers and public health professionals.

Richard Cookson's Inaugural lecture 'Unequal lives: breaking the wealth-health link' took place on 12th May at the Ron Cooke Hub, University of York.

Mike Drummond presented on 'Value assessment frameworks in Europe' and 'Biosimilars and health technology assessment' at the Bulgarian Association for Drug Information workshop, Sofia, 19th May.

At the The ISPOR 22nd Annual International meeting, held in Boston USA 20th to 24th May 2017, **Mike Drummond** was a discussion leader on 'Dealing with the challenges of providing information to payers prior to product launch' and 'Biosimilars in the US: an opportunity lost or in the making?' He also spoke on career advice across the globe.

Mark Sculpher and Andrew Briggs conducted a short course at ISPOR on advanced decision modelling for health economic evaluations. Mark presented 'Reflecting affordability in cost-effectiveness analysis through appropriate measures of opportunity cost', 'Why we need to consider empirical estimates of opportunity costs' and 'Future directions for CEA defining benefits and how much we should pay for them'. Mark announced that the 2017 ISPOR Avedis Donabedian Outcomes Research Lifetime Achievement award would be presented to Paul Kind who worked in CHE for many years.

In June **Paul Revill** and **Beth Woods** presented in workshops on HIV modelling and economics at the World Bank and US National Institutes of Health (NIH) in Washington DC, convened by the HIV Modelling Consortium.

New funding

Facilitating patient choice in haemato-oncology
Andrea Manca, Hyacinthe Kankeu
(Led by Health Sciences, York)
Funder: National Institute for Health Research Programme Grant
Dec 2015 to Nov 2018

Economic & Methodological Unit for NICE
Helen Weatherly, Susan Griffin
(Led by York Health Economics Consortium)
Funder: National Institute for Health and Care Excellence (NICE)
Apr 2016 to Mar 2018

Provision of an evaluation of vanguard status
Andrew Street, Anne Mason, Panos Kasteridis
Funder: Yeovil District Hospital NHS Foundation Trust
Aug 2016 to Aug 2018

Improving the Wellbeing of people with Opioid Treated Chronic Pain (I-WOTCH)
Andrea Manca
(Led by University of Warwick)
Funder: National Institute for Health Research Health Technology Assessment
Sept 2016 to Nov 2019

Wearable Clinic: connecting health, self and care
Andrea Manca
(Led by University of Manchester)
Funder: The Engineering and Physical Sciences Research Council
Mar 2017 to Feb 2020

Children with HIV in Africa – pharmacokinetics and acceptability of simple antiretroviral regimens (CHAPAS 4)
Paul Revill, Jessica Ochalek, Beth Woods, Alex Rollinger
(Led by University of Zimbabwe College of Health Sciences)
Funder: The European & Developing Countries Clinical Trials Partnership
Apr 2017 to Mar 2022

System efficiency in mental health
Rowena Jacobs, Adriana Castelli, Maria Goddard, Hugh Gravelle, Nils Gutacker, Anne Mason, Maria Jose Aragon
Funder: Health Foundation
May 2017 to Apr 2021

Abongomera G, Kiwuwa-Muyingo S, **Revill P**, et al. Impact of decentralisation of antiretroviral therapy services on HIV testing and care at a population level in Agago District in rural Northern Uganda: results from the Lablita population surveys. *International Health* 2017;9(2): 91-99.

Ahern A, Wheeler G, Aveyard P, Boyland E, Halford J, Mander A, Woolston J, Thomson A, Tsiountsioura M, Cole D, Mead B, Irvine L, Turner D, **Suhrcke M**, et al. Extended and standard duration weight loss referrals for adults in primary care (WRAP): a pragmatic randomised controlled trial. *Lancet* 2017; 389(10085):2214-2225.

Ali S, Tsuchiya A, **Asaria M**, **Cookson R**. How robust are value judgments of health inequality aversion? Testing for framing and cognitive effects. *Medical Decision Making* 2017;doi:10.1177/0272989X17700842.

Antioch K, **Drummond M**, Niessen L, et al. International lessons in new methods for grading and integrating cost effectiveness evidence into clinical practice guidelines. *Cost Effectiveness and Resource Allocation* 2017;15(1).

Bojke C, **Grasic K**, **Street A**. How should hospital reimbursement be refined to support concentration of complex care services? *Health Economics* 2017;doi:10.1002/hec.3525.

Bojke L, **Manca A**, **Asaria M**, Mahon R, Shijie R, **Palmer S**. How to appropriately extrapolate costs and utilities in cost-effectiveness analysis. *Pharmacoeconomics* 2017;doi:12.10.1007/s40273-017-0512-6.

Burns DK, Jones AP, Goryakin Y, **Suhrcke M**. Is foreign direct investment good for health in low and middle income countries? An instrumental variable approach. *Social Science & Medicine* 2017;181:74-82.

Chalkley M, McCormick B, Anderson R, **Aragon MJ**, et al. Elective hospital admissions: secondary data analysis and modelling with an emphasis on policies to moderate growth. *Health Services and Delivery Research* 2017;5(7).

Cookson R, **Mirelman A**, **Griffin S**, **Asaria M**, et al. Using cost-effectiveness analysis to address health equity concerns. *Value in Health* 2017;20(2):206-212.

Dhami S, Kakourou A, Asamoah F, et al. **Asaria M**, et al. Allergen immunotherapy for allergic asthma: a systematic review and meta-analysis. *Allergy* 2017;doi: 10.1111/all.13208.

Dhami S, Nurmatov U, Arasi S, Khan T, **Asaria M**, et al. Allergen immunotherapy for allergic rhinoconjunctivitis: a systematic review and meta-analysis. *Allergy* 2017; doi:10.1111/all.13201.

Duarte A, **Walker S**, Littlewood E, Brabyn S, Hewitt C, Gilbody S, **Palmer S**. Cost-effectiveness of computerized cognitive-behavioural therapy for the

treatment of depression in primary care: findings from the Randomised Evaluation of the Effectiveness and Acceptability of Computerised Therapy (REEACT) trial. *Psychological Medicine* 2017;doi:10.1017/S0033291717000289.

Gaughan J, **Gravelle H**, **Santos R**, Siciliani L. Long-term care provision, hospital bed blocking, and discharge destination for hip fracture and stroke patients. *International Journal of Health Economics and Management* 2017;doi:10.1007/s10754-017-9214-z.

Goryakin Y, **Revill P**, **Mirelman A**, Sweeney R, **Ochalek J**, **Suhrcke M**. Public financial management and health service delivery: A literature review. Overseas Development Institute Report; London: April 2017.

Goryakin Y, Rocco L, **Suhrcke M**. The contribution of urbanization to non-communicable diseases: evidence from 173 countries from 1980 to 2008. *Economics and Human Biology* 2017;doi:10.1016/j.ehb.2017.03.004.

Gutacker N, **Street A**. Use of large scale HRQoL datasets to generate individualised predictions and inform patients about the likely benefit of surgery. *Quality of Life Research* 2017;doi:10.1007/s11136-017-1599-0.

Hettle R, Corbett M, **Hinde S**, Hodgson R, Jones-Diette J, Woolacott N, **Palmer S**. The assessment and appraisal of regenerative medicines and cell therapy products: an exploration of methods for review, economic evaluation and appraisal. *Health Technology Assessment* 2017;21(7):1-238.

Hinde S, Allgar VL, **Richardson G**, Spiers G, Parker G, Birks Y. An evaluation of the costs and consequences of Children Community Nursing teams. *Journal of Evaluation in Clinical Practice* 2017;doi:10.1111/jep.12716.

Hinde S, **Bojke L**, **Richardson G**, Retat L, Webber L. The cost-effectiveness of population health checks: have the NHS health checks been unfairly maligned? *Journal of Public Health* 2017;doi:10.1007/s10389-017-0801-8.

MacPherson H, Vickers A, Bland M, Torgerson D, Corbett M, Spackman E, **Saramago P**, **Woods B**, **Weatherly H**, **Sculpher M**, **Manca A**, et al. Acupuncture for chronic pain and depression in primary care: a programme of research. *Programme Grants for Applied Research* 2017;5(3).

Mannion R, Davies H, **Jacobs R**, **Kasteridis P**, Millar R, Freeman T. Do hospital boards matter for better, safer, patient care? *Social Science & Medicine* 2017;177:278-287.

Patton T, **Bojke L**, Walton M, **Manca A**, Helliwell P. Evaluating the cost-effectiveness of biologic treatments for psoriatic arthritis: can we make better use of patient data registries? *Clinical Rheumatology* 2017;doi:10.1007/s10067-017-3703-9.

Phillips A, Stover J, Cambiano V, Nakagawa F, Jordan M, Pillay D, Doherty M, **Revill P**, et al. Impact of HIV drug resistance on HIV/AIDS associated mortality, new infections and antiretroviral therapy program costs in sub-Saharan Africa. *The Journal of Infectious Diseases* 2017;215(9):1362-1365.

Pinho M, Pinto Borges A, **Cookson R**. Do healthcare professionals have different views about healthcare rationing than college students? A mixed methods study in Portugal. *Public Health Ethics* 2017;doi:10.1093/phe/phx005.

Sculpher M, **Claxton K**, Pearson S. Developing a value framework: the need to reflect the opportunity costs of funding decisions. *Value in Health* 2017;20(2):234-9.

Sweeney R, **Suhrcke M**, Jeon JY, Mortimer D. The impact of SWaPs on health aid displacement of domestic health expenditure. *The Journal of Development Studies (JIDS)* 2017;doi:10.1080/00220388.2017.1303670.

Tarricone R, Torbica A, **Drummond M**. Challenges in the assessment of medical devices: the MedtecHTA project. *Health Economics* 2017;26(Suppl 1):5-12.

Tarricone R, Torbica A, **Drummond M** for the MedtecHTA Project Group. Key recommendations from the MedtecHTA project. *Health Economics* 2017;26(Suppl 1):145-152.

Woods B, **Manca A**, **Weatherly H**, **Saramago P**, **Sideris E**, et al, **Sculpher M**. Cost-effectiveness of adjunct non-pharmacological interventions for osteoarthritis of the knee. *PLoS ONE* 2017;doi:10.1371/journal.pone.0172749.

Latest CHE research papers

144 Do hospitals respond to rivals' quality and efficiency? A spatial econometrics approach. Francesco Longo, Luigi Siciliani, Hugh Gravelle and Rita Santos.

145 The effect of hospital ownership on quality of care: evidence from England. Giuseppe Moscelli, Hugh Gravelle, Luigi Siciliani and Nils Gutacker.

146 Productivity of the English NHS: 2014/15 update. Chris Bojke, Adriana Castelli, Katja Grašič, Daniel Howdon, Idaira Rodriguez Santana and Andrew Street.

147 Health care costs in the English NHS: reference tables for average annual NHS spend by age, sex and deprivation group. Miqdad Asaria.

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