CHE
Centre For Health Economics

Health Economics *News*

issue 25 • March 2016
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Welcome to the CHE Newsletter

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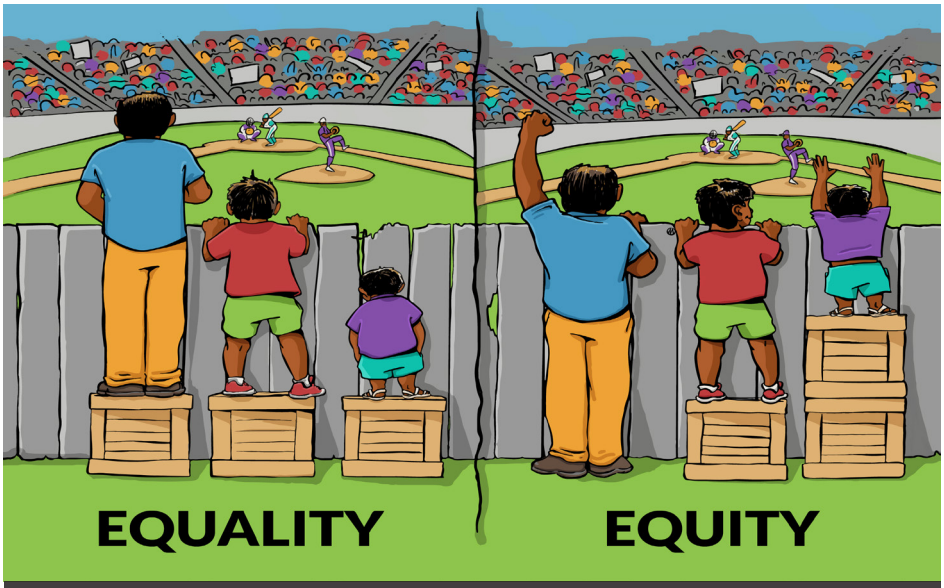
Athena SWAN Bronze Award



Health equity indicators for the English NHS

Research team: Richard Cookson, Miqdad Asaria, Shehzad Ali, Maria Goddard (CHE), Brian Ferguson (Public Health England), Robert Fleetcroft (University of East Anglia), Peter Goldblatt (UCL Institute for Health Equity), Mauro Laudicella (City University London), Rosalind Raine (University College London)

England's A&E crisis is fuelled by social inequality. The poorest fifth of neighbourhoods suffer nearly two-and-a-half times as many preventable emergency hospitalisations as the least deprived fifth, allowing for age and sex. These are admissions for long-term conditions – such as dementia, diabetes, respiratory and cardiovascular diseases – that can potentially be avoided by more proactive co-ordination of care between GPs, hospitals and social services. And it's not just the poor. Middle England – the middle fifth of neighbourhoods – experiences over 40% more preventable A&E admissions than the top fifth.

The NHS is good at providing equal access to GPs and hospitals when you suffer a health emergency. It is less good at providing care before you suffer an emergency. That's the difference between equality and equity – as illustrated by this cartoon of people watching a baseball game. Giving everyone the same thing only works if they start from the same place. The rich are good at co-ordinating their own care – they have better information, stronger social networks, nicer home environments to recover from illness, sharper elbows. Everyone else needs proportionately more help. That's why we have developed health equity indicators for the NHS, to provide NHS managers with better information about inequalities of healthcare access and outcomes within their local area.

Further details are available online www

Courses and workshops

York Summer Workshops in Health Economic Evaluation June/July 2016

Further details: www

Hospital trusts' productivity in the English NHS

Research team: Maria Jose Aragon Aragon, Adriana Castelli, James Gaughan

A major policy priority for the NHS is to increase efficiency and prevent waste. This study investigates hospital productivity, defined as the ratio of output to resources used. Variation in productivity between hospitals suggests that resources might be used in better ways to achieve savings. We consider two questions: (1) Are there productivity differences between hospitals after considering features that might influence their productivity? (2) Which of those features have the strongest association with productivity?

We use two productivity measures. Output produced per staff member and per unit of all inputs (staff, materials and capital). We consider a wide range of hospital outputs, including the number of patients treated and the amount of community care provided.

We find (1) productivity varies substantially between hospitals and this persists over time; (2) larger hospitals and Foundation Trusts, which have more freedom in spending decisions, are less productive. Hospitals treating more patients in their last year of life are more productive, contrary to expectations that treatment of these more complex patients may require additional resources.

Understanding the reasons for associations between productivity and hospital characteristics is an important area of future research. For full report see CHE Research Paper 117.

Getting the right balance? Gender, ethnicity and socioeconomic background of doctors in training in the UK

Research team: Idaira Rodríguez Santana, Martin Chalkley

Becoming a medical practitioner in the United Kingdom is a highly competitive process and represents a substantial investment of time and financial resources, much of that funded out of taxation. It determines the composition of the medical profession. There is growing concern that the profession should reflect not only appropriate skills but a balance of social, economic, gender and ethnicity.

Our study analysed the distribution of socioeconomic and demographic characteristics of medical trainees across different specialties in the UK using data from the National Training Survey 2013. We found systematic and substantial differences between specialties. Surgical specialties are more male, more white British and more socio-economically privileged than general practice whilst psychiatric specialties are more male, more ethnically diverse, older, and more socio-economically privileged than general practice.

Differences in the characteristics of trainees will feed into the composition of the practising profession. The persistent gender gap, the under-representation of those coming from the disadvantaged backgrounds and the inequity of educational background in some specialties will influence public perceptions of the NHS and the medical profession. Our analysis contributes to an understanding of these differences. For full report see CHE Research Paper 119.

Determining health spending priorities in LMICs

Research team: Jessica Ochalek, Beth Woods, Paul Revill, Karl Claxton, Mark Sculpher, James Lomas

Healthcare systems in low- and middle-income countries (LMICs) face considerable population healthcare needs with markedly fewer resources than developed countries. Determining which interventions to fund with limited resources requires some assessment of the 'health opportunity costs'. Health opportunity costs occur because funding one intervention means that other interventions cannot be provided. This is typically reflected in a cost-effectiveness threshold (CET). However, LMICs have often used CETs based on aspirational expressions of value, such as the World Health Organization's (WHO) recommended 1-3 times GDP per capita as opposed to CETs that reflect opportunity costs.

Two recent CHE Research Papers estimate opportunity cost-based CETs for a wide range of LMICs. Woods et al. (2015) (CHE Research Paper 109) estimates CETs based upon empirical estimates of the effect of health expenditure and income elasticities of the value of health. Ochalek et al. (2015) (CHE Research Paper 122) estimates CETs using published estimates of the mortality effect of health expenditure from cross-country data. The results of both suggest that CETs representing health opportunity costs are below the range suggested by the WHO.

The implications of both papers are that many recommendations about which interventions are cost-effective may reduce rather than increase population health. There is an urgent need to revise CETs used in practice and for further empirical research to establish the values CETs should take across LMICs.

The clinical and cost-effectiveness of graduated compression stockings: is a large, multi-centre RCT necessary and worthwhile?

Research team: Eleftherios Sideris, Stephen Palmer, Eldon Spackman (CHE), Ros Wade, Fiona Paton, Stephen Rice, Dave Fox, Nerys Woolacott (Centre for Reviews and Dissemination, University of York)

Deep vein thrombosis (DVT) is a condition in which a blood clot forms in the deep veins of the lower limbs, causing a blockage. DVT does not frequently result in death, but if left untreated it can result in pulmonary embolism (PE). PE is the cause of 10% of hospital deaths in the UK. Medication, such as heparin, and use of graduated compression stockings (GCS) reduce the risk of DVT.

Although GCS are recommended as a method for prevention of DVT in postoperative surgical patients, their appropriate length (thigh or knee-length) remains controversial. Existing evidence is uncertain and a recent systematic review called for a large multi-centre RCT, which would have significant resource implications.

Instead, our research (1) compared the clinical and cost-effectiveness of thigh-length versus knee-length stockings using the existing evidence base and (2) aimed to explore the value of conducting further research.

The use of thigh-length GCS alongside preventive medication appeared to be cost-effective. Our research indicated that, although uncertainty remains regarding the appropriate length of GCS, a large trial in lower-risk patients (such as total hip replacement or general surgery patients) does not appear worthwhile. Even in high-risk subgroups, the decision depends on the feasibility and cost of undertaking the proposed trial.

For full NIHR report see here www

Latest news

At the ISPOR 18th Annual European Congress held in Milan in November 2015, **Mark Sculpher** gave talks on 'the role of QALY measurements in decision making' and 'the use of managed entry agreements for new pharmaceuticals'; **Beth Woods** and **Miqdad Asaria** presented 'harnessing "big data" and taming high dimensional decision problems for economic evaluation'; and **Andrea Manca** presented 'health state utility values: measuring, modelling, and mapping: task force interim report'.

Also in November, **Mark Sculpher** gave a talk at the French Department of Health's (HAS) meeting on '10 years of health technology assessment'. In December he gave a talk to the Central and Eastern European Society of Technology Assessment in Health Care, 10th International Symposium Evidence-Based Health Care, Kraków, Poland, on 'The societal perspective in economic evaluation'. In February 2016, Mark gave a keynote presentation at the Third Annual Global Health Economics Consortium Colloquium at the University of California San Francisco entitled 'Making economic evaluation fit for purpose to support decisions'.

Anne Mason gave the invited, keynote presentation 'Integration and efficiency in health and social care: Lessons from the UK and abroad' at the Centre for Health and Social Economics (CHESS) annual seminar at the National Institute for Health and Welfare (THL), Helsinki, Finland in November 2015.

James Lomas presented 'Evaluating interventions that improve health through improvements in air quality' at the Air Pollution and Public Health advisory group meeting, Birmingham in November and also 'Making the case: health impact assessment and the health economics of low emission zones (Leeds and Bradford)'at the Investigation of Air Pollution Standing Conference, Birmingham in December.

While in Zimbabwe in December, **Paul Revill** presented 'Using modelling to inform and respond to WHO Guidelines' at the HIVMC and WHO meeting of model makers and policymakers; and 'Sustainable ART in Africa through viral-load informed differentiated care' at the International Conference on AIDS and STIs in Africa.

In January 2016, **Karl Claxton** and **Mark Sculpher** delivered a workshop on 'Advanced methods in HTA' at the Prince Mahidol Award Conference in Bangkok.

Andrew Street has been appointed as special advisor to the House of Commons Health Select Committee for its inquiry into the Impact of Comprehensive Spending Review on health and social care.

CHE research on how patients choose hospitals for planned surgery has been featured in Twenty Reports To Make You Think published by the Patient Experience Library.

In February, **Paul Revill** provided a plenary presentation at the World Bank Efficiency in Health Conference and also attended and participated in a US Dept. of State (PEPFAR, CDC) policy consultation on the future of US HIV/AIDS funding in Washington DC.

New funding

Supporting the uptake of methods development
Paul Revill
Funder: University of York
Aug 2015 to Oct 2016

NIHR HTA: EVAR pathways (EndoVascular Aneurysm Repair)
Mark Sculpher
Funder: NIHR HS&DR
Sept 2015 to Jan 2016

STAMPEDE (Systematic Therapy in Advancing or Metastatic Prostate Cancer: Evaluation of Drug Efficacy)
Mark Sculpher
Funder: CRUK
Sept 2015 to Jun 2016

Competition policy in other health systems and what can be learned for UK health policy
Martin Chalkley and **Hugh Gravelle** (led by Luigi Siciliani, DERS, University of York)
Funder: Health Foundation
Oct 2015 to Sept 2016

Evaluation of a specialist nursing support service for carers of people with dementia
Helen Weatherly (led by Gillian Parker, SPRU, University of York)
Funder: NIHR HS&DR
Nov 2015 to July 2017

CHE Publications November 2015 - February 2016

Abongomera G, Kiwuwa-Muyingo S, **Revill P**, et al. for the Lablite Project Team. Population level usage of health services, and HIV testing and care, prior to decentralization of antiretroviral therapy in Agago District in rural Northern Uganda. *BMC Health Services* Research 2015;15:527.

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Latest CHE research papers

CHERP119 The socioeconomic and demographic characteristics of United Kingdom junior doctors in training across specialities

CHERP120 Efficiency, equity and equality in health and health care

CHERP121 Cost-effectiveness thresholds in health care: A bookshelf guide to their meaning and use

CHERP122 Cost per DALY averted thresholds for low- and middle-income countries: Evidence from cross country data

CHERP123 Location, quality and choice of hospital: Evidence from England 2002/3-2012/13

CHERP125 Eliciting the level of health inequality aversion in England

CHERP126 Productivity of the English NHS: 2013/14 update

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