



Centre For Health Economics

Health Economics News

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Welcome to the CHE Newsletter

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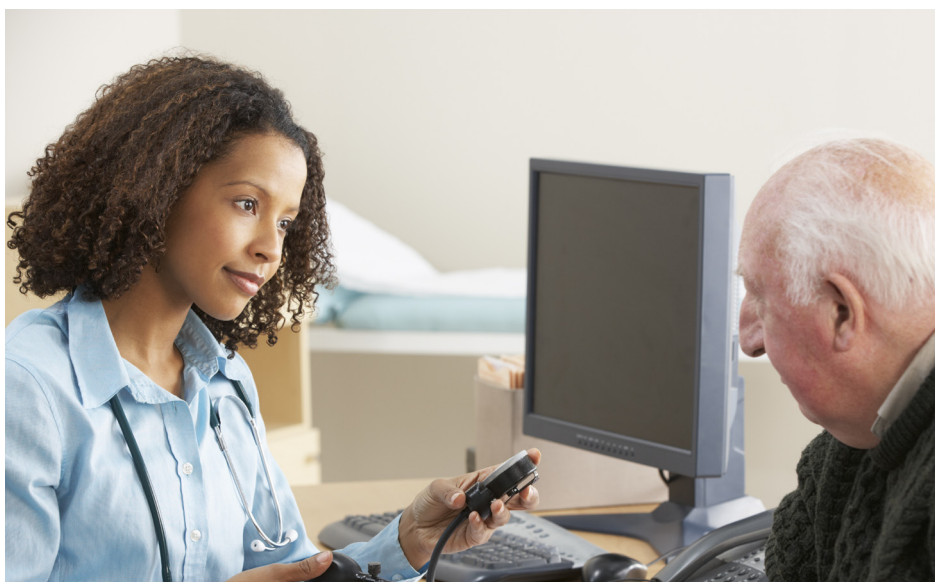
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Paying GPs to provide good quality care for people with dementia – the effects on hospital admissions

Research team: Panagiotis Kasteridis, Anne Mason, Maria Goddard, Rowena Jacobs, Rita Santos (CHE), Gerard McGonigal (York Teaching Hospital NHS Foundation Trust)

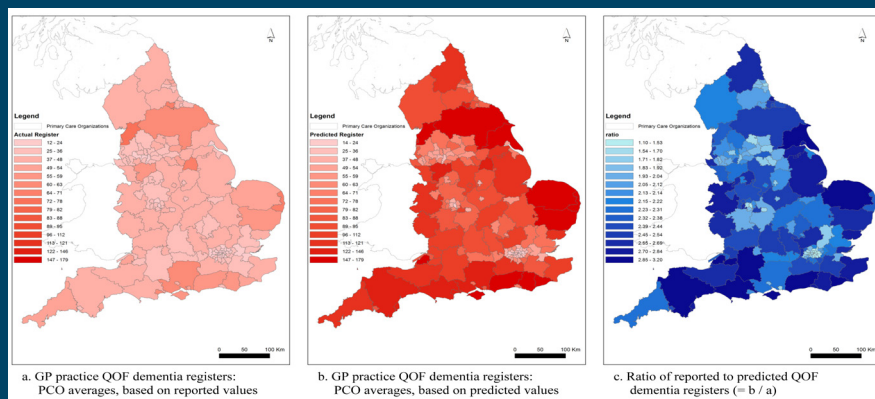
Dementia is a major and increasing cause of disability in older people, and the condition also impacts carers and families. Emergency hospital admission can be a defining moment in the life of someone with dementia, heralding an avoidable downward health spiral. Studies show that dementia care is often poor and badly co-ordinated.

GPs are rewarded for reviewing their patients with dementia. The annual review focuses on support needs, but also covers the patient's mental and physical health, the impact of caring, and ensuring services are co-ordinated across the system. The review could help prevent emergency admissions, for example by detecting and treating problems at an early stage.

Our research investigated whether GP practices that review comparatively more of their dementia patients also have fewer emergency hospital admissions for these patients. As many people with dementia are undiagnosed, we also predicted the size of dementia registers based on published estimates of age-sex specific prevalence (see Figure).

Higher scoring practices had significantly fewer unplanned admissions for dementia patients. Given the health burden of the disease for both patients and carers, the pressure on hospital beds and the associated healthcare costs, even a small effect may be valuable. Further details are available online. www.york.ac.uk/che/publications

Figure: Dementia prevalence based on reported and predicted QOF disease registers



QOF: quality and outcomes framework; PCO: primary care organisation.

What is the economic impact of type II diabetes around the world?

Research team: Marc Suhrcke (CHE), Till Seuring (University of East Anglia), Olga Archangelidi (University College London)

Diabetes is a chronic disease that has spread widely in recent decades not only in high-income countries (HICs), but also in many low and middle-income countries (LMICs). While it is widely known that diabetes poses a huge health challenge, awareness of its economic impact is much more limited. This research involved the largest and most up-to-date global literature review and exploratory regression analysis of studies examining the economic burden of type II diabetes (T2D) published over the past 13 years. The study focussed upon three indicators of the economic impact of T2D: (i) direct healthcare costs; (2) indirect costs i.e. loss of income owing to diabetes related illness; (iii) impact upon a sufferer's employment and earning capability.

The study found healthcare spending on T2D rises as a country's economic wealth increases, though with considerable variation depending on the exact estimation method (see Figure). The majority of direct costs incurred by sufferers in LMICs come from out-of-pocket payments, a phenomenon not as widely experienced in HICs thanks to a greater prevalence of affordable medication and personal health-insurance which caps these costs. As a result, sufferers in LMICs can experience a higher personal

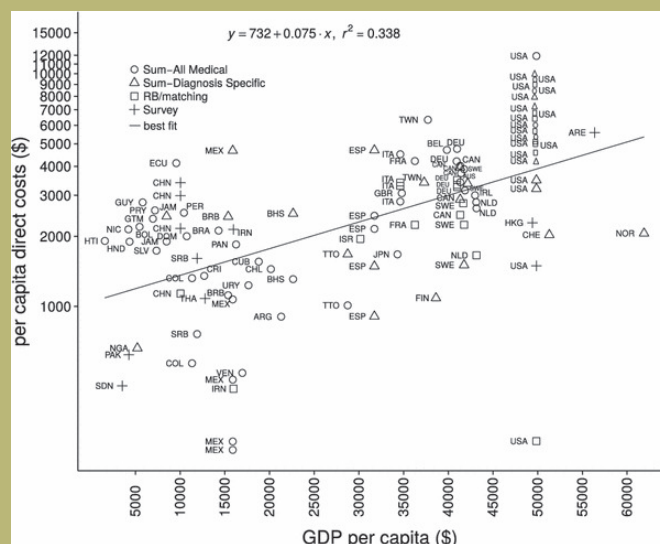


Figure: The relationship between GDP per capita and per capita direct costs attributable to type II diabetes

Note: The line depicts the best fit based on the linear regression of direct costs on GDP per capita in international dollars. Different symbols imply different estimation approaches (see original paper for details). The y-axis presenting per capita direct costs is expressed in log scale.

cost burden than those in HICs. Research specifically on the labour market consequences remains limited, especially so in LMICs.

Download the full paper from PharmacoEconomics here www.pharmaco-economics.com and one follow-up paper on the labour market impact of T2D in Mexico, published in Economics & Human Biology here www.ehponline.org

Supporting decision-making in Latin America

Alex Rollinger

In September, researchers from CHE visited Santiago, Chile in order to participate in a one-day workshop focussing upon research methods to support priority setting for health benefit packages (HBP) in Latin America. The event – co-organised by CHE and Pontificia Universidad Católica de Chile, and funded through the International Decision Support Initiative (IDSI) - aimed to address the challenges faced by researchers and policymakers in the region. Countries from across Latin America were represented at the event, including: Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Uruguay, and Venezuela.

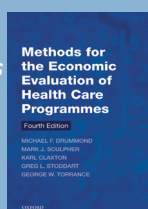
Economic evaluation specialists from the UK and North America delivered presentations alongside researchers from the region on research methods and analytical techniques which could be utilised to support resource allocation decisions in Latin America. CHE's Mark Sculpher presented on recent developments in cost-effectiveness thresholds and discussed the validity of the widely used 1 – 3 x GDP per capita thresholds.

Attendees identified some of the main challenges they face when making healthcare funding decisions, including successfully communicating to the public how the results of cost-effectiveness analyses (CEA) are used to make funding decisions, and managing potential conflicts of interest arising during CEA. CHE researchers suggested methods to build stronger relationships with the local media and fellow researchers in Latin America as a way to tackle these challenges.

A summary of the event is available to download. www.chestrust.org.uk

Methods for the economic evaluation of health care programmes (fourth edition)

The fourth edition of the popular textbook, *Methods for the Economic Evaluation of Health Care Programmes* was published in September. The book is co-authored by Mike Drummond, Mark Sculpher and Karl Claxton from CHE, as well as George Torrance and Greg Stoddart, professors Emeritus at McMaster University in Canada.



Methods in this field have moved on in the 10 years since the last edition. The new edition reflects this. Material on measuring and valuing effects reflects the growth in relevant literature, in particular the methodological work on quality-adjusted life-years and the growing use of conjoint analysis. Two new chapters discuss the methods of evidence synthesis and characterising uncertainty.

The most fundamental change relates to the role of economic evaluation in decision-making. Two new chapters emphasise that, in health care decision-making, it is important to be clear on what we are trying to maximise (for example, health or welfare), relevant constraints facing health systems and the importance of opportunity cost. The choice of methods and the use of study results are now integrated throughout the book, rather than being discussed in separate chapters.

This all amounts to a revised book, with a new structure and around 45% new material. www.blackwellpublishing.com/9781118400591

CHE's health economics masters students placements

James Lomas

Eight students from the MSc Health Economics degree course at the University of York and two from the MSc Health Economics and Decision Modelling course at the University of Sheffield spent 3 months based at CHE this summer undertaking research projects with members of CHE staff. In September, eight of them presented their dissertations in CHE. An annual event for some years now, this occasion was once again very interesting and enjoyable for students and attendees alike. The topics spanned CHE's research areas with stimulating presentations on issues of health policy, health equity, global health, health technology assessment and various combinations of these. CHE is grateful for the hard work of the students and wish them all the best for the future. A list of the summer students and their placement topics are below:

Anum Shaikh: Exploring the relationship between morbidity and utilisation of health and social care

Giovanni Van Empel: Does quality affect patient choice of general practice?

Chloi Theriou: The cost-effectiveness of EndoPredict to inform adjuvant chemotherapy decisions in early breast cancer

Charlotte Renwick: Understanding the impact of malnutrition of the economic evaluation of enteric disease vaccination

Bryony Dawkins: Distributional cost-effectiveness analysis in global health

Platonas Yfantopoulos: Substitution bias in the English NHS

Luis Tierrablanca Sanudo: Seeking efficiency in HIV care for adolescents: economic evaluation of the BREATHER trial

Sophie Boukouvalas: Cost-effectiveness and value of information analysis for home oxygen therapy

Fanen Verinumbe: Cost-effectiveness analysis of screening and diagnostic tests to identify and treat women with gestational diabetes: association between maternal risk factors, glucose levels and adverse Outcomes

Fadi Chehadah: Exploring the impact of different methods for modelling multiple endpoints from survival data on the health economic evaluation

Latest news

Hugh Gravelle, Rita Santos, Irene Sanchez, Susan Griffin and James Love-Koh attended the Second EuHEA PhD student-supervisor and early career researcher conference at Université Paris Dauphine 2-4 September 2015.

CHE is to collaborate with researchers from the University of Twente in the Netherlands and the Luxembourg Institute of Health in a £1.2 million project over four years. 'Investigating the clinical and economic challenges of personalised medicine'. The project will be led by Professors **Andrea Manca** (York), Maarten IJzerman (Twente) and Ngianga-Bakwin Kandala (Luxembourg Institute of Health). As part of this collaboration Andrea Manca has received a 4-year appointment as Visiting Scientist at the Luxembourg Institute

In September **Ryota Nakamura** presented on cost-effectiveness thresholds for Latin American countries, at the 7th RedESTA (Lanzamiento de la Red de Evaluación de Tecnologías Sanitarias) meeting at Santiago, Chile. In October he gave a special lecture on 'health economics and health technology assessment in Japan', at the 21st Symposium of Institute of Health Economics and Policy (jointly organized by NICE, UK) in Tokyo, Japan.

Richard Cookson helped advise the UK Department of Health on developing a local NHS 'scorecard' to monitor the quality of healthcare services in local areas, as a member of the technical advisory group for a Kings Fund report published in October 2015.

Gerry Richardson attended the European Public Health Association conference in Milan in October and gave a presentation on an economic evaluation of 'preschoolers in the playground' intervention.

Andrew Street has been appointed to the NIHR board of the newly merged Health Services and Delivery Research programme. He gave the keynote address at the 14th Portuguese National Conference on Health Economics. Lisbon, Portugal, 15-16 October.

On 16 October, **Mike Drummond** gave the keynote address at the Italian Association of Health Economists' 20th Annual Conference. He spoke on the 'Impact of Using Economic Evaluation on Healthcare Innovation: sail or anchor?'

Tony Culyer gave a keynote lecture at the ISPOR meeting in Santiago Chile on Sept 7 and a seminar on equity and HTA at the School of Population Studies in Mahidol University, Bangkok.

Courses and workshops

Regression methods for health economic evaluation - March 2016

Decision analytic modelling for economic evaluation - April 2016

York summer workshops in health economic evaluation - June/July 2016

For more details see our website www.che.ac.uk

New funding

Commissioning public health services: The impact of the health reforms on access, health inequalities and innovation

Anne Mason

Funder: DoH PRP
Jan 2015 to Jun 2017

REFOCUS

Gerry Richardson

Funder: NIHR HS & DR
Mar 2015 to Jun 2016

Policy Research Programme: Fast response analytical facility

Andrew Street (Led by Karen Bloor, Health Sciences, University of York)

Funder: DoH PRP
May 2015 to Apr 2018

CAPITAL4HEALTH

Marc Suhrcke

Funder: Ministry for Education & Research, Germany
Feb 2015 to Jan 2018

Health economics of personalised medicine

Andrea Manca

Funder: Luxembourg Institute of Health
Sept 2015 to Aug 2019

GP funding formula review

Hugh Gravelle

May 2015 to Dec 2015

NIHR research methods fellowship and internship

Mark Sculpher

Funder: NIHR
Oct 2015 to Sept 2017

Developing an online tool to inform patients about their likely outcome of surgery to impact on shared decision making in primary care in York

Nils Gutacker

Funder: ESRC IAA (Impact Acceleration Award) via University of York
Aug 2015 to July 2016

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Latest CHE research papers

CHERP113 - The impact of primary care quality on inpatient length of stay for people with dementia: An analysis by discharge destination

CHERP114 - Waiting time prioritisation: evidence from England

CHERP115 - Multidimensional performance assessment using dominance criteria

CHERP116 - Choosing and booking – and attending? Impact of an electronic booking system on outpatient referrals and non-attendances

CHERP117 - Hospital trusts productivity in the English NHS: uncovering possible drivers of productivity variations

CHERP118 - How much should be paid for Prescribed Specialised Services?

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