



Centre For Health Economics

# Health Economics News

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## Welcome to the CHE Newsletter

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## Delayed discharges and hospital type: evidence from the English NHS

CHE project team: James Gaughan, Hugh Gravelle, Luigi Siciliani

Delayed discharges of patients from hospital, commonly known as bed-blocking, are a long standing policy concern in the UK and other OECD countries. Delays can increase the overall cost of treatment and may worsen patient outcomes.

We investigate how delays vary by type of hospital and the extent to which such differences can be explained by patients' characteristics, the availability of long-term care, and hospital governance - as reflected in whether the hospital has Foundation Trust status which gives greater autonomy and flexibility in staffing and pay.

Using longitudinal data of delays in all English NHS hospitals from 2011/12 to 2013/14, and employing count data models, we find that: (a) a greater local supply of long-term care (care home beds) is associated with fewer delays; (b) hospitals which are Foundation Trusts have fewer delays and might be used as exemplars of good practice in managing delays; and (c) mental health Trusts have more delays but a smaller proportion of them are attributed to the NHS, possibly indicating a greater lack of adequate community care for mental health patients.

For the full report see CHE Research Paper 133 [www](http://www.york.ac.uk/che/publications)

## Non-invasive prenatal testing: more questions than answers

CHE project team: Pedro Saramago, Stephen Palmer and Susan Griffin

About three in twenty women in the UK have a blood type called RhD-negative. If they become pregnant, around six in ten will have babies with opposite blood type (RhD-positive). The woman's immune system can react to the baby's blood - a process called sensitisation - which potentially will have severe consequences on babies of subsequent pregnancies and ultimately may lead to baby's death. The risk of sensitisation can be substantially reduced by injecting women with anti-D immunoglobulin (IgG). Currently, all pregnant women with RhD-negative blood are offered this injection later in pregnancy and after birth. However, women carrying an RhD-negative baby do not need this injection. A non-invasive prenatal blood test (NIPT) may determine the blood type of the baby during pregnancy and so the anti-D IgG injection can be avoided in women who do not need it.

A CHE team investigated whether using NIPT was a cost-effective way to manage RhD-negative women. Scenarios were designed to evaluate different impacts of NIPT on existing pre- and post-partum pathways. Results showed that targeted provision of anti-D IgG injection through the use of NIPT is cost-saving compared to current practice. Potential savings were highly sensitive to the cost of the NIPT itself.

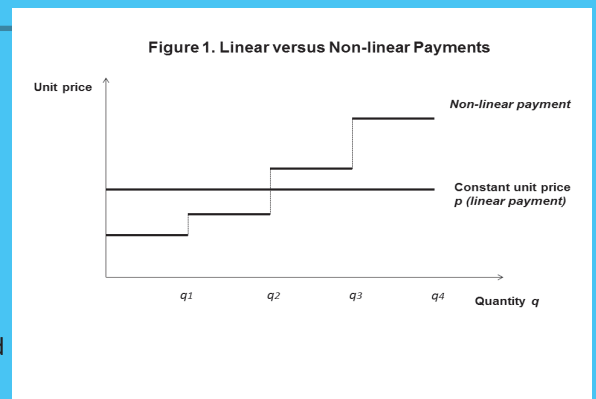
For further project information see: [www](http://www.york.ac.uk/che/publications)

# Paying for performance in low- and middle-income countries

CHE project team: Martin Chalkley, Andrew Mirelman, Marc Suhrcke

Recent research brings an economic perspective to the question of paying for performance (P4P) for health in low- and middle-income countries (LMIC). The authors combined knowledge about P4P theory and applications in both high-income countries and LMIC settings and provided a 'back to basics' perspective on these important issues informed by health economic theory of contracts and incentives. They highlight several points to consider in programme design, such as the feasibility of non-linear payments (see figure), and elaborate on unintended consequences that may arise, such as gaming or multi-tasking. A review of recent P4P programmes in LMICs further informed the work and showed that many of the concepts are indeed universal. Similar to high-income country settings, there is mixed evidence about the effectiveness of P4P for providing health care. The authors hope that this work will lead to further research collaboration in this area and have shown that the translation of lessons between high-income country and LMIC contexts is feasible. The work was funded as part of the international decision support initiative (IDSi).

Link to CHE Research Paper 140 here: [www.che.ac.uk](http://www.che.ac.uk)



## CHE researchers take on the challenges in the assessment of medical devices

Mike Drummond

Researchers from CHE recently participated in the MedtechTA Project 'Methods for Health Technology Assessment of Medical Devices: a European Perspective' (see article in next column). The project, which was led



by Università Bocconi in Milan, was funded by the European Union under the Seventh Framework Programme. The assessment of the clinical and cost-effectiveness of medical devices (MDs) poses several challenges because of the

relative lack of clinical data, the interaction between the device and the user (the 'learning curve'), the existence of incremental innovation and the need to access the broader organizational impact. Researchers from six European countries participated in the project, which produced recommendations for improving the process for HTA of MDs, developing methods for the HTA of MDs and ways of optimizing the diffusion of MDs. CHE's main role was to develop methods for characterizing the uncertainty in the assessment of MDs and for determining future research needs.

The full results of the project have recently been published in a supplement to *Health Economics* 2017;26(Suppl. 1): 1-152.) [www.che.ac.uk](http://www.che.ac.uk)

## Characterising uncertainty in the assessment of medical devices and determining future research needs

CHE project team: Claire Rothery, Karl Claxton, Stephen Palmer, Mark Sculpher

Medical devices have traditionally been less regulated than pharmaceuticals, and the amount of evidence required for licensing is often very limited. Early access to new medical devices is important to patients, but a decision to adopt a device early in its life cycle when the evidence base is least mature can carry substantial risk and uncertainty for patient outcomes. Equally, rejecting a device will result in no uptake in practice and hence no chance to learn about performance. Decision options such as 'only in research' (OIR) or 'approval with research' (AWR) can overcome these issues by allowing patients early access to promising new technologies while limiting the risks associated with making incorrect decisions until more evidence or learning is established. Our research sets out a framework for characterising uncertainty in the assessment of medical devices. We show the circumstances under which an OIR or AWR scheme may represent the most appropriate policy choice for devices.

Full details can be found here: [www.che.ac.uk](http://www.che.ac.uk)

## New book 'Maynard Matters'

Editors: Richard Cookson, Maria Goddard, Trevor Sheldon

This edited volume demonstrates the value of critical thinking about health policy as communicated by one of the world's most influential health economists. Short new pieces by colleagues celebrating Professor Alan Maynard's contributions to academic and public life are followed by a selection of his own writings on topics ranging across competition, markets, quality, incentives, equity and efficiency, rationing, and drug and alcohol policy. They illustrate his use of intellectual insight, wit and purposeful provocation to achieve impact. Maynard's work matters: it matters to policy-makers, managers, practitioners and citizens, as well as to academics. The book was launched at the University of York where many of Alan's friends and colleagues - past and present - celebrated with an early Christmas lunch.

There is a web page dedicated to stories and messages from friends, colleagues and students of Professor Alan Maynard, as a complement to this book. To view the comments and to add your own please visit <https://maynardmatters.com>.

For more information about *Maynard Matters* and to download the book for free or buy a copy, please see here. [www](http://www.www)



### Selected news

#### October 2016:

**Mark Sculpher** delivered a seminar at the Department of Health Economics, Center for Public Health, Medical University of Vienna.

#### November 2016:

**Anne Mason** and Linda Marks (PI, Durham University) gave a seminar on research into the 'Impact of Public Health reforms 2013' to the Department of Health. Anne spoke on her recent analysis of NHS Health Checks.

**Rodrigo Moreno Serra** attended the meeting 'Global Health Aid Allocation: Policy Challenges and the Research Agenda', held at the Rockefeller Center in Bellagio (Italy).

#### December 2016:

**Jessica Ochalek** (pictured) presented 'Are current cost-effectiveness "thresholds" for low- and middle-income countries useful? Examples from the world of vaccines' at the Fondation Merieux Conference 'Estimating the full public health value of vaccines' in Annecy, France.

**Mark Sculpher** contributed to a one-day conference on the recommendations of the Second Panel on Cost-Effectiveness in Health and Medicine at the National Academy of Sciences in Washington DC.

#### January 2017:

The winter HESG meeting took place in Birmingham and CHE staff who attended included **James Gaughan, Nils Gutacker, Hugh Gravelle, Anne Mason, Dan Liu,**

**Noemi Kreif, Giuseppe Moscelli, Anika Reichert** and **Andrew Street**.

**Nils Gutacker** attended the kick-off meeting of the Marie Curie European Training Network 'Improving Quality of Care in Europe (IQCE)' in Hamburg.

#### February 2017:

**Andrea Manca** gave seminars at University of Birmingham and Office of Health Economics London on 'Economic evaluation for decision-making and the value of access to individual patient data'.

**Paul Revill** attended a UK All-Party Parliamentary Group on Global Health meeting on 'African-European partnership for global health benefit' at the Houses of Parliament.

**Giuseppe Moscelli** presented 'Categorising mental health patients for payment purposes: does the hospital matter? Evidence from English mental health providers' at the International Health Policy Conference at London School of Economics.

**Claire Rothery** gave a presentation at Lancaster University on 'Characterising uncertainty in the assessment of medical devices and determining future research needs'.



**James Lomas** gave a presentation at NICE 'Estimating the health opportunity costs of changes in NHS and public health expenditure'. He also presented 'Resolving the 'cost-effective but unaffordable 'paradox': estimating the health opportunity costs of non-marginal changes in available expenditure' at Erasmus University, Rotterdam and University of Groningen.

**Rowena Jacobs** gave an invited presentation at SEDA Research Group Seminar, HYMS, University of Hull entitled 'Do care plans influence admissions and mortality for people with serious mental illness'.

### Courses and workshops

York Summer Workshops in Health  
Economic Evaluation June/July 2017

Further details: [www](http://www)



Ali S, **Cookson R**, Dusheiko M. Addressing care-seeking as well as insurance-seeking selection biases in estimating the impact of health insurance on out-of-pocket expenditure. *Social Science and Medicine* 2016;doi:10.1016/j.socscimed.2016.11.005.

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**Mirelman A.** Economic evaluation of diabetes prevention: informing global health implementation decisions. *The Lancet Diabetes & Endocrinology* 2016;4(11):879-880.

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## New funding

Levels and determinants of health system efficiency in Latin America and the Caribbean.

**Rodrigo Moreno-Serra**

Funder: Inter-American Development Bank  
Nov 2016 to Mar 2017

HARMONY - Healthcare alliance for resourceful medicines offensive against neoplasms in haematology

**Andrea Manca** led by Dept of Health Sciences at University of York

Funder: European Commission  
Jan 2017 to Dec 2021

Global cost-effectiveness thresholds

**Karl Claxton, Mark Sculpher, Paul Revill, Claire Rothery, James Lomas, Jessica Ochalek**

Funder: Bill and Melinda Gates Foundation  
Oct 2016 to Mar 2018

Developing a reference protocol for expert elicitation in health care decision making  
**Laura Bojke, Karl Claxton, Marta Soares, Eleftherios Sideris**

Funder: MRC  
Nov 16 to Oct 2018

Multiple versus staged stenting for elective PCI  
**Laura Bojke, Gerry Richardson, Nils Gutacker, Miqdad Asaria, Katja Grašič, Alessandro Grosso** (CHE), Alexander Harrison, Patrick Doherty (Dept of Health Sciences at University of York  
Funder: NIHR Research Capability funds  
Sept 2016 to Mar 2017

Assessing a brief value of information (VoI) method for its potential use in assisting panel and board decision making

**Claire Rothery, Karl Claxton**

Funder: NIHR HTA  
Oct 2015 to Sept 2016

## Latest CHE research papers

139 Market structure, patient choice and hospital quality for elective patients. Giuseppe Moscelli, Hugh Gravelle and Luigi Siciliani.

140 Paying for performance for health care in low- and middle-income countries: an economic perspective. Martin Chalkley, Andrew Mirelman, Luigi Siciliani and Marc Suhrcke.

141 Defining and measuring unmet need to guide healthcare funding: identifying and filling the gaps. María José Aragón, Martin Chalkley and Maria Goddard.

142 The economics of health inequality in the English NHS - the long view. Miqdad Asaria.

143 First do no harm – The impact of financial incentives on dental x-rays. Martin Chalkley and Stefan Listl.

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

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