

ECONOMIC ANALYSIS
OF WORLDWIDE
REPUTE

INFORMING
POLICY AND
PRACTICE





ANNUAL REPORT 2014

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Over 130 new
publications

WELCOME



AN ACADEMIC RESEARCH
CENTRE OF WORLDWIDE
REPUTE UNDERTAKING
ECONOMIC ANALYSIS OF
HEALTH AND HEALTHCARE
TO INFORM POLICY AND
PRACTICE.

Welcome to the 2014 annual report from the Centre for Health Economics (CHE). Throughout 2014 – our 31st as a health economics research unit – we were as busy and productive as ever. We have undertaken research on topics of importance nationally and internationally, including both applied and methods based research. 2014 saw the publication of the results of the national evaluation of research quality (the Research Excellence Framework – REF). CHE was part of the University's submission to the 'Public Health, Health Services and Primary Care' Unit of Assessment made jointly with the Dept of Health Sciences, the Centre for Reviews and Dissemination and the Hull-York Medical School. The REF rated 83% of the research submitted as 'world leading' or 'internationally excellent'. The impact our research makes on society and citizens was valued highly, 100% of it was rated in the top two categories as having 'outstanding' (80%) or 'very considerable' (20%) impacts in terms of its reach and significance. Our research environment was rated as conducive to producing world-leading research, offering 'vitality and sustainability'.

Amongst the research questions we addressed last year: 'how can we measure the impact of interventions on health inequalities?'; 'does pooling health and social care funding improve the outcomes of integrated care?'; 'do people with serious mental illness have equal access to services?'; 'how should we invest in activities to improve the implementation of cost-effective interventions?'; 'how does being a carer affect wellbeing?'; 'has the productivity of the NHS increased?'; 'how should the cost-effectiveness of healthcare interventions in low- and middle-income countries be assessed?'; 'how can we measure post-surgical outcomes?' We have also evaluated a wide range of interventions in the UK,



Europe and across the world, encompassing the entire health and social care pathway: from lifestyle and behaviour, screening and vaccination programmes, through to drug therapies and advanced surgery, and on to the care and self-management of chronic disease. Our research in global health economics progressed well, building on the expansion we began towards the end of 2013 and the appointment of new staff. Some highlights from this work, as well as some of our other research themes, are presented later in the report.

We are always pleased to welcome colleagues from all over the world and our role in helping to create and maintain health economics capacity in research, policy and practice settings, is something we value highly in CHE. Last year we trained over 300 people from 33 countries as they participated in our short courses and workshops based here in York. We also hosted 14 visitors, some of whom were former members of staff or students, and they came to York from Australia, Chile and several European countries. Two other colleagues arrived for visits from Australia and Sweden, recipients of the Alan Williams Fellowships that CHE offers annually to support interesting research collaborations. Eight new members of research staff took up posts, some of whom added to our developing global health research team, whilst others are supporting ongoing research strands; two new PhD students began their studies under the supervision of CHE staff; and six students from the MSc Health Economics course were based at CHE for their placement projects.

I am constantly amazed and delighted by the 'boomerang effect' of CHE whereby many of those we welcome back each year as course participants, visitors, new staff members, students and research collaborators, have been based at CHE before in some capacity. Indeed, four of our new appointments were made to researchers previously at CHE as either a PhD student, Career Development Intern or MSc placement student. Even those who do not return physically in some capacity, add to the ever-growing networks which allow us to exchange interesting ideas and forge new collaborations all over the world. I believe that it is a reflection of the intellectual vitality of CHE and the importance of the research questions we address, that allows us year after year to attract some of the best people to study, work, visit and collaborate with us – and it is our staff and students who are the heart of CHE.

Last but not least, we were thrilled that our application for an Athena SWAN Bronze Award was successful, marking our commitment to good practice in recruiting, retaining and supporting the careers of women. We are building on this success by further improving our processes to ensure fair conditions for **all** staff members and students and I am sure this too will add to the CHE 'boomerang' effect.

Professor Maria Goddard

CHE Director Maria Goddard appointed to HSCIC Board



Maria Goddard was appointed as a Non-Executive Director to the Board of the national body responsible for health and social care data collection, analysis and dissemination in England.

Three year NIHR Doctoral Fellowship



Rita Santos has been awarded a National Institute for Health Research Doctoral Fellowship. Her research is entitled 'Measuring and explaining variations in general practice performance'. Over 3 years she will be analysing the large variation across general practices in the proportion of patients treated in hospital for particular conditions.



40 and 25 years' long service awards

John Galloway, CHE's Computing Support Officer, achieved 40 years' service and **Vanessa Wood**, CHE's Finance and Research Support Co-ordinator, achieved 25 years' service. They both received their awards from Professor Koen Lamberts at a ceremony held on **7 May 2014**.

EuroQol award for CHE

An article written by **Nils Gutacker, Chris Bojke, Silvio Daidone, Nancy Devlin and Andrew Street** exploring Hospital Variation in Patient-Reported Outcomes was awarded the prize for best scientific paper in 2013 by the EuroQoL group. (Hospital variation in patient reported outcomes at the level of EQ-5D dimensions: evidence from England *Medical Decision Making* 2013; 33(6): 804-818.)

Award for Mike Drummond



Mike Drummond was presented with an award by the Center for the Evaluation of Value and Risk in Health, Tufts University, Washington. The award was made at the Cost-Effectiveness Analysis Registry's

15th anniversary symposium held on 10 September and the citation states "In recognition of outstanding contributions to cost-effectiveness analysis".



Senior Research Fellow appointed to SSAC

Chris Bojke was appointed as an economist on the NICE Safe Staffing Advisory Committee (SSAC). SSAC is the independent NICE body set up to provide guidance on levels and mix of staffing on adult inpatient wards. The committee was set up as a result of staffing level failures in Mid Staffordshire as indicated in the Francis Inquiry Report.

Poster presentation award for PhD student

Idaira Rodriguez, PhD student in CHE, won a poster presentation award at the 34th Conference of Health Economics held on 27-30 May



2014 in Pamplona, Spain. Her work was entitled 'Social determinants of mental health: empirical evidence for Catalonia (2010-2012)' presented jointly with Natalia Pascual Argente.

CAHSPR lectureship

In October the Justice Emmett Hall Memorial Foundation selected Tony Culyer as the 2015 Hall Laureate and invited him to deliver the lectureship during the 2015 Canadian Association for Health Services and Policy Research (CAHSPR) conference.

"CHE has been a first class opportunity to develop my research skills"

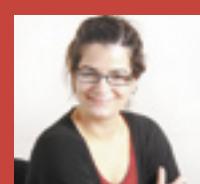


Eleftherios Sideris: "Being a career development intern at CHE has been a first-class opportunity to develop my research skills not only through attending formal training courses but,

more importantly, through getting involved in a variety of projects and interacting with highly skilled researchers. Equally valuable and rewarding was the opportunity to participate in policy-relevant research projects that directly inform decision makers."

Marta Soares' selected for 2014 ISPOR Award

Marta Soares was selected by the ISPOR Awards Committee as the recipient of the 2014 ISPOR Award for Excellence in Application of Pharmacoeconomics and Health Outcomes Research. She was awarded this distinction as corresponding author of the research paper 'Methods to assess cost-effectiveness and value of further research when data are sparse: negative-pressure wound therapy for severe pressure ulcers' in *Medical Decision Making* 2013; 33(3):415-436 (co-authors from CHE include Laura Bojke and Karl Claxton).





Marc Suhrcke



Ryota Nakamura



Jessica Ochalek



Andrew Mirelman



GLOBAL HEALTH ECONOMICS

In 2014 CHE established a new research theme in global health economics, building on and developing our existing research in this area. Four new research staff have been appointed with expertise in global health: Marc Suhrcke (Chair in Global Health Economics), Ryota Nakamura, Jessica Ochalek and Andrew Mirelman. They join existing CHE research staff with interests in this area, including Mark Sculpher, Paul Revill, Karl Claxton, Martin Chalkley, Richard Cookson, Susan Griffin and Beth Woods.

At present CHE's work in global health is evolving and mostly within the broad area of economic evaluation; although some research activities in other areas have commenced (e.g. on equity, provider payments, and the economics of non-communicable diseases). A notable initiative is our work under the newly established international Decision Support Initiative (iDSI) (<http://www.idsihealth.org/>); a collaboration between the University of York, NICE International, the Centre for Global Development in the US, the Health Intervention and Technology Assessment Program (HITAP) in Thailand, Imperial College London, the Office of Health Economics and other institutions.

It is anticipated that iDSI will be a sustainable, adaptable, international mechanism to provide policymakers (at sub-national, national, regional and international levels) with coordinated support in priority-setting as a means to Universal Health Coverage (UHC). The initiative will share experiences, showcase lessons learned, and identify practical ways to scale technical support for more systematic, fair and evidence informed priority-setting processes. Its aim is to ultimately improve access to effective health improving interventions and increase the quality and efficiency of healthcare delivery through supporting priority setting.

CHE is the lead academic partner for iDSI and is helping to develop a network of health economic institutions to support activities to inform healthcare priority setting in low and middle income countries. An early output has been the development of a Reference Case in economic evaluation for the Bill and Melinda Gates Foundation (BMGF) (<http://www.york.ac.uk/>

media/che/documents/reports/MEEP-report.pdf). The Reference Case comprises a set of principles, methodological specifications and reporting standards and helps guide analysts in the production of economic evaluations and policymakers in their interpretation.

At present the Reference Case is primarily a 'principles based' approach to economic evaluation. However, work is underway to provide guidance on the methods that could be employed to adhere to those principles. CHE's contributions will particularly focus on the development of empirically informed cost-effectiveness thresholds for low- and middle-income countries, an area that cuts across the fields of economic evaluation and applied econometrics.

Global health research is undertaken in several other departments at the University of York and CHE hopes to bring an economics dimension to some of this work. CHE also collaborates closely with a number of institutions outside of the University of York operating in the sphere of global health; in particular the MRC Clinical Trials Unit, the HIV Epidemiology and Biostatistics Group at UCL and the HIV Modelling Consortium, with a secretariat at Imperial College London. It is envisaged our activities in global health will increase in the coming years and CHE staff are actively engaged in exploring how our existing expertise in health economics can be brought to bear to support health improvement in low- and middle-income countries.

RESEARCH PROJECTS

IN PROGRESS AND COMPLETED IN 2014

ECONOMIC EVALUATION AND HEALTH TECHNOLOGY ASSESSMENT

TECHNOLOGY ASSESSMENTS FOR NICE

Multiple Technology Appraisal

Adalimumab, etanercept and infliximab for the treatment of ankylosing spondylitis (Review of TA143 and TA233)

Stephen Palmer, Marta Soares, Eldon Spackman, Eleftherios Sideris

Single Technology Appraisal

Ipilimumab for previously treated unresectable malignant melanoma

Claire McKenna, Christina Giannopoulou, Eleftherios Sideris



Daclatasvir for treating chronic hepatitis C

Beth Woods, Susan Griffin, Rita Faria

Health Technology Assessments

Graduated compression stockings for treating chronic hepatitis C

Eldon Spackman, Eleftherios Sideris, Stephen Palmer

POLICY AND SERVICE SUPPORT PROGRAMMES

POLICY RESEARCH UNIT IN ECONOMIC EVALUATION OF HEALTH AND CARE INTERVENTIONS (EPRU) FUNDED BY THE DEPARTMENT OF HEALTH

An economic framework to support decisions regarding the reallocation of resources between the NHS, public health and social care

Mark Sculpher, Simon Walker, Sebastian Hinde, Karl Claxton



Assessing potential research activities associated with medicines optimisation

Rita Faria, Mark Sculpher



Assessing the value of national medical audits in supporting decisions

Mark Sculpher, Ana Duarte, Simon Walker, Stephen Palmer



Developing an analytical framework relating to the value of implementation to inform decisions of the NICE Implementation Collaborative

Rita Faria, Simon Walker, Steve Palmer, Mark Sculpher



Developing the methods of economic evaluation for individualised care

Manuel Espinoza, Mark Sculpher, Andrea Manca, Karl Claxton



Economic analysis relating to the NICE cost-effectiveness threshold to support value-based pricing

Karl Claxton, Marta Soares, Susan Griffin, Sebastian Hinde, Mark Sculpher, Eldon Spackman

Economic evaluation of the ACE Programme – diagnostic pathways in cancer

Susan Griffin, Sebastian Hinde, Mark Sculpher



Methods of economic evaluation in social care

Helen Weatherly, Rita Faria, Bernard van den Berg, Mark Sculpher



Methods of economic evaluation when interventions have costs and/or effects outside health

Susan Griffiths, Simon Walker, Mark Sculpher, Rita Faria, Karl Claxton, Helen Weatherly, Bernard van den Berg



Review of linked routine datasets in the NHS and their potential value for the economic evaluation of interventions for cancer

Sebastian Hinde, Claire McKenna, Mark Sculpher



Reviewing methods challenges relating to the economic evaluation of genetic services

Eldon Spackman, Sebastian Hinde, Mark Sculpher, Laura Bojke



The carers' breaks initiative: a review of the progress made in improving support for carers

Helen Weatherly



THE NATIONAL INSTITUTE FOR HEALTH RESEARCH (NIHR) RESEARCH DESIGN SERVICE FOR YORKSHIRE & THE HUMBER (RDS YH)

Gerry Richardson, Susan Griffin, Rita Faria

Funder: NIHR



THE NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE DECISION SUPPORT UNIT (DSU)

Stephen Palmer, Claire McKenna, Marta Soares, Eldon Spackman

Funder: NICE

METHODOLOGICAL RESEARCH

Health equity impacts: evaluating the impacts of organisations and interventions on social inequalities in health

Richard Cookson

Funder: NIHR, senior research fellowship



HIV modelling consortium: the value of survey information in geographical targeting of HIV/AIDS interventions

Beth Woods, Claire McKenna, Karl Claxton

Funder: Bill and Melinda Gates Foundation



Methods for Health Technology Assessment of Medical Devices: a European perspective (MedTecHTA)

Mark Sculpher, Stephen Palmer, Claire McKenna, Simon Walker

Funder: European Commission



Modelling generic preference based outcome measures - developing and comparison of methods

Andrea Manca (Led by Sheffield University)

Funder: MRC

NIHR senior investigator award

Mark Sculpher

Funder: NIHR

APPLIED RESEARCH

A clinical and economic evaluation of screening and diagnostic tests to identify and treat women with gestational diabetes: association between maternal risk factors, glucose levels and adverse outcomes

Mark Sculpher, Susan Griffin, Ana Duarte

Funder: NIHR HTA

Acupuncture for chronic pain and depression in primary care

Mark Sculpher, Andrea Manca, Beth Woods, Helen Weatherly, Pedro Saramago, Eldon Spackman, Eleftherios Sideris

Funder: NIHR

Adjunctive rifampicin to reduce early mortality from staphylococcus aureus bacteraemia: a multi-centre, randomised, double blind, placebo controlled trial (the ARREST trial)

Marta Soares

Funder: NIHR HTA

An evaluation of multifunctional magnetic resonance imaging in the diagnosis and characterisation of prostate cancer (PROMIS)

Mark Sculpher, Rita Faria, Eldon Spackman

Funder: NIHR HTA

AntiRetroviral Research for Wattoto (ARROW) = Young lives: the social contexts and economic realities of paediatric anti-retroviral therapy

Mark Sculpher, Paul Revill, Susan Griffin, Bernard van den Berg

Funder: DFID (via MRC-CTU)

A project mapping hospital utilisation and outcomes in six European Union countries ("ECHO" – European Collaboration for Healthcare Optimization)

Richard Cookson

Funder: the European Union

Assessing the feasibility of implementing and evaluating a new problem solving model for patients at risk of self-harm and suicidal behaviour in prison

Gerry Richardson (Led by Amanda Perry, Department of Health Sciences, York)

Funder: NIHR RfPB

CHAPAS 3 Children with HIV in Africa – Pharmacokinetics and adherence/acceptability of simple antiretroviral regimes

Paul Revill, Mark Sculpher, Susan Griffin

Funder: EDCTP & DNDI (via MRCCTU @UCL)

CLAHRC II – health economics

Mark Sculpher, Gerry Richardson, Laura Bojke (CHE), Karen Bloor (Department of Health Sciences, York)

Funder: NIHR CLAHRC

CLAHRC research capacity funding 14-15 – health economic and outcome measurement

Laura Bojke, Susan Griffin, Gerry Richardson, Mark Sculpher

Funder: CLAHRC RCF

Clinical Evaluation of 3T Magnetic Resonance imaging for the management of patients with coronary heart disease: the CE-MARC 2 Study

Mark Sculpher, Simon Walker (Led by the University of Leeds)

Funder: British Heart Foundation

Developing and evaluating a patient-led, electronic incident reporting scheme for renal patients

Gerry Richardson (Led by Department of Health Sciences, York)

Funder: NIHR HTA

Developing indicators of change in the NHS equity performance

Richard Cookson, Miqdad Asaria, Shehzad Ali

Funder: NIHR HSR

Does home oxygen therapy (HOT) in addition to standard care improve disease severity and symptoms in chronic heart failure?

Susan Griffin, Mark Sculpher

Funder: NIHR HTA

Economic evaluation of systemic therapies in advancing or metastatic prostate cancer using data from the STAMPEDE trial

Mark Sculpher

Funder: Cancer Research UK

ELFIN: A multi-centre randomised placebo-controlled trial of prophylactic enteral supplementation with bovine lactoferrin

Gerry Richardson (Led by University of Oxford)

Funder: NIHR HTA

EPOCH: Enhanced peri-operative care for high risk patients trial. A stepped wedge randomised cluster

Gerry Richardson (Led by Barts & The London Queen Mary's School of Medicine and Dentistry)

Funder: NIHR HS&DR

Establishing priority-setting institutions in developing countries: International Decision Support Initiative (IDSI)

Mark Sculpher, Marc Suhrcke, Paul Revill, Karl Claxton, Beth Woods, Jessica Ochalek, Ryota Nakamura, Andrew Mirelman

Funder: Bill and Melinda Gates Foundation

Evaluating the Family Nurse Partnership Programme in England: a randomised controlled trial

Gerry Richardson

Funder: DH Policy Research Programme

Exploring and quantifying preferences towards self-management support interventions: a mixed-methods survey among individuals with long term health conditions

Andrea Manca, Gerry Richardson, Bernard van den Berg (CHE), Cynthia Iglesias, Yvonne Birks (University of York), Seda Erdem (University of Stirling), Peter Bower (University of Manchester)

Funder: Health Foundation

RESEARCH PROJECTS

IN PROGRESS AND COMPLETED IN 2014

FAST Forward: a randomised clinical trial testing a 1-week course of curative whole breast radiotherapy against a standard 3-week schedule in terms of local cancer control and late adverse effects in women with early breast cancer

Susan Griffin, Mark Sculpher

Funder: NIHR HTA

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Healthy & Active Parenting Programme for Early Years Study (HAPPY Study)

Gerry Richardson

Funder: NIHR Programme Grant

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HIV modelling consortium: implementation issues for monitoring people on ART in low-income settings in sub-Saharan Africa

Paul Revill, Simon Walker

Funder: Bill and Melinda Gates Foundation

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How effective, accessible and acceptable are self-management interventions for men with long-term conditions?

Gerry Richardson

Funder: NIHR HS&DR

•••

ICON 7 – A randomised, two-arm, multicentre gynaecologic cancer intergroup trial of adding bevacizumab to standard chemotherapy (carboplatin and paclitaxel) in patients with epithelial ovarian cancer.

Mark Sculpher, Sebastian Hinde, David Epstein

Funder: Medical Research Council Clinical Trials Unit

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ICON 8

Mark Sculpher

Funder: Cancer Research UK

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Improving the quality of care for angina and heart attack

Mark Sculpher, Stephen Palmer, Miqdad Asaria, Simon Walker

Funder: NIHR Programme Grant

•••

Late aneurysm-related mortality up to 15 years, secondary endovascular repair late sac rupture and costs and cost effectiveness implications in the United Kingdom EndoVascular Aneurysm Repair (EVAR) randomised controlled trials

Mark Sculpher (Led by Imperial College, London)

Funder: NIHR HTA

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Models of reablement evaluation: a mixed methods evaluation of complex intervention (The MORE Project)

Helen Weatherly, Rita Faria (Led by Fiona Aspinal, SPRU, York)

Funder: NIHR HS&DR

•••

Opioids in heart failure

Gerry Richardson (Led by Miriam Johnson, University of Hull)

Funder: British Heart Foundation

•••

Optimising clinical care strategies and laboratory monitoring for cost-effective roll-out of antiretroviral therapy in Africa: the lab-lite project,

Paul Revill, Mark Sculpher, Bernard van den Berg

Funder: The Department for International Development (DFID)

Pre-schoolers in the playground (PIP) – a cluster randomised controlled trial of physical activity intervention for children aged 18 months – 4 years

Gerry Richardson (via Department of Health Sciences, York)

Funder: NIHR PHR

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PREventing infection using Antibiotic Impregnated Long lines (PREVAIL) – clinical and economic analysis

Rita Faria, Laura Bojke

Funder: NIHR HTA

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REvascularisation of Ischaemic Ventricular Dysfunction (REVIVED): a randomised comparison of percutaneous coronary intervention (with optimal medical therapy) versus optimal medical therapy alone for heart failure secondary disease

Mark Sculpher, Sebastian Hinde

Funder: NIHR HTA

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Scaphoid Waist Internal Fixation for Fractures Trial (SWIFFT) Cast treatment versus surgical fixation of fractures of the Scaphoid waist in adults: a multi-centre randomised controlled trial

Gerry Richardson, Claire McKenna

Funder: NIHR HTA

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SOPHIE Evaluating the impact of structural policies on health inequalities and their social determinants and fostering change

Marc Suhrcke

Funder: EC (Via University of East Anglia)

•••

Surgical wounds healing by secondary intention: characterising and quantifying the problem and identifying effective treatments

Marta Soares, Karl Claxton, Pedro Saramago

Funder: NIHR Programme Grant

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The delivery of chemotherapy at home: an evidence synthesis

Gerry Richardson (Led by the Centre for Reviews and

Dissemination, York)

Funder: NIHR HS&DR

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Transforming community health services for children and young people who are ill: a quasi-experimental evaluation

Gerry Richardson, Sebastian Hinde

Funder: NIHR HS&DR

•••

UK FROST – Multi-centre randomised controlled trial with economic evaluation and nested qualitative study comparing early structured physiotherapy versus manipulation under anaesthesia versus arthroscopic capsular release for patients referred to secondary care with a frozen shoulder (Adhesive Capsulitis)

Gerry Richardson (Led by Amar Rangan, The James Cook University Hospital)

Funder: NIHR HTA

•••

Wounds research for patient benefit programme

Marta Soares, Pedro Saramago

Funder: NIHR Programme Grant

Rowena Jacobs (left) receiving the award from Professor Dame Julia Higgins – Athena SWAN Patron



CHE RECEIVES AN ATHENA SWAN BRONZE AWARD

At CHE we strive to create an inclusive culture and to provide a supportive and family-friendly work environment and to offer equal opportunities to all staff and students. We were therefore delighted that in 2014 our efforts were rewarded with official recognition through an Athena SWAN Bronze Award.

The Athena SWAN Charter, run by the Equality Challenge Unit (ECU), has been developed to encourage the advancement of women's careers in STEMM (science, technology, engineering, maths and medicine) departments and to improve employment practices in higher education and research. Our award recognises CHE's commitment to good practice in recruiting, retaining and supporting the careers of women. As part of the process for obtaining the Award, CHE set up an Athena SWAN self-assessment team (SAT) to collect and interrogate data and reflect on our organisation and processes, allowing us to develop an action plan in full consultation with staff and students which further improves our processes to ensure fair, flexible, accessible and transparent working conditions for all members of staff.

In our submission, we were commended by the panel for a number of factors: the engagement from the director and leadership from the top; our emphasis on 'growing our own staff', supporting them to move into senior roles; our gender mix on all recruitment panels; our 'buddy' system for new staff; our 100% return to work rate (on flexible arrangements) following maternity leave; and our promotion success rates for women.

A good practice example which the panel commended at the Awards ceremony was putting our submission online and surveying staff and students to see if they felt that the submission accurately reflects the culture (work practice and environment) of CHE. The survey response showed that staff agreed.

Maria Goddard (CHE Director) and Rowena Jacobs (Chair of CHE's Athena SWAN SAT), said: "CHE is delighted with the award; we have a long-standing commitment to equality and the Award provides us with the focus, motivation and impetus to achieve our goals. This is a step on our journey, rather than our final destination and we are already working hard on implementing our action plan to the benefit of all staff in CHE."

In response to the plans of the ECU to broaden its remit to cover non-research staff groups and a range of other equality characteristics in addition to gender, we are reconstituting our Athena SWAN SAT into an Equality and Diversity Action Team (EDAT). We will consider a wider set of equality issues beyond gender, building on the foundation provided by the Athena SWAN Bronze Award.

For further information see:

<http://www.york.ac.uk/che/news/athenaswan-award/>



RESEARCH PROJECTS

IN PROGRESS AND COMPLETED IN 2014

HEALTH POLICY

MENTAL HEALTH

Do higher primary care practice performance scores predict lower rates of emergency admissions for persons with serious mental illness? An analysis of secondary panel data

Rowena Jacobs, Maria Goddard, Hugh Gravelle, Nils Gutacker, Anne Mason (CHE), Simon Gilbody (Department of Health Sciences, York), Tony Kendrick (Hull York Medical School), June Wainwright, Lauren Aylott (Service Users)

Funder: NIHR HS&DR



Influence of flexible working conditions on psychological health

Rowena Jacobs (CHE), Cinzia di Novi (Università Ca' Foscari Venezia, Italy)

Funder: Alan Williams Fellowship



The quality of life of female informal caregivers

Rowena Jacobs (CHE), Cinzia di Novi (Università Ca' Foscari Venezia, Italy)

Funder: Alan Williams Fellowship



Mental health: variations in length of stay

Rowena Jacobs, Valerie Moran, Anne Mason



Efficiency and performance of mental health systems

Rowena Jacobs, Valerie Moran

Funder: OECD

PROVIDER PAYMENT

EU Interquality: the relationship between hospital funding and quality

Andrew Street (CHE), John Hutton, Lu Han (Department of Health Sciences, York), Steve Martin (Department of Economics and Related Studies, York)

Funder: 7th EU Framework Programme



Stochastic queuing model of optimal provider payment mechanisms

Hugh Gravelle (CHE), Fred Schroyan (Bergen)



Payment mechanisms with patient selection

Hugh Gravelle, Andrea Manca (CHE), Luigi Siciliani (Department of Economics and Related Studies, York)



Paying for specialised care: making the health sector work for patients

Andrew Street, Chris Bojke, Katja Grašić

Funder: Monitor

PATIENT-REPORTED OUTCOME MEASURES (PROMS)

Comparing PROMs and costs across European countries

Nils Gutacker (CHE), Matthias Vogl (University of Munich)

Funder: University of Munich



Addressing missing data in patient-reported outcome measures (PROMs): implications for the use of PROMs for comparing provider performance

Nils Gutacker, Chris Bojke, Andrew Street (CHE), Manuel Gomes (London School of Health and Tropical Medicine)

Funder: MRC and Department of Health



Do PROMs influence choice of hospital?

Hugh Gravelle, Nils Gutacker, Giuseppe Moscelli (CHE), Luigi Siciliani (Department of Economics and Related Studies, York)

Funder: Department of Health

PERFORMANCE AND EFFICIENCY ANALYSIS

ECHO: European Collaboration for Healthcare Optimization

Nils Gutacker, Richard Cookson (CHE), Karen Bloor (Department of Health Sciences, York)

Funder: 7th EU Framework Programme



The efficiency of Australian dental practice

Nils Gutacker (CHE), Tony Harris (Monash University, Australia), David Brennan (University of Adelaide, Australia), Bruce Hollingsworth (University of Lancaster)



Hospital competition and quality: a spatial-econometrics approach

Hugh Gravelle, Rita Santos (CHE), Luigi Siciliani (Department of Economics and Related Studies, York)

Funder: Department of Health



The relationship between NHS Board governance and quality and patient safety

Rowena Jacobs, Panos Kasteridis (CHE), Russell Mannion, Ross Millar (University of Birmingham), Huw Davies (St Andrews University), Tim Freeman (Middlesex University)

Funder: NIHR HS&DR



CLAHRC II – evidence based transformation in the NHS

Andrew Street, Nils Gutacker, Katja Grašić (Led by Rebecca Lawton, University of Leeds and Bradford Institute for Health Research)

Funder: NIHR CLAHRC YH (Collaboration for Leadership in Applied Health Research and Care Yorkshire and Humber)



Avoidable Scottish hospitalisations

Mark Dusheiko (Led by Marjon van der Pol, University of Aberdeen)

Funder: Chief Scientist Office, Scotland



Developing indicators of change in NHS equity performance

Richard Cookson, Mark Dusheiko, Rita Santos, Maria Goddard

Funder: NIHR HS&DR

Rescaling the benefits and tracking the impact of medical revalidation

Nils Gutacker, Chris Bojke, Karen Bloor (Led by Kieran Walshe, University of Manchester Business School)

Funder: NIHR PRP CCF

PRODUCTIVITY OF HEALTH CARE

Productivity of the Italian health care system

Chris Bojke, Adriana Castelli, Katja Grašič, Andrew Street (CHE), Vincenzo Atella, Federico Belotti, Andrea Piano Mortari (Tor Vegata, Rome)

Funder: Italian Ministry of Health



Measuring and analysis of NHS productivity growth

Andrew Street, Chris Bojke, Adriana Castelli, Katja Grašič

Funder: Department of Health



NHS hospital provider productivity and variation analyses

Adriana Castelli, James Gaughan, Maria Jose Aragon

Funder: Department of Health

PRIMARY CARE

Does quality affect patient choice of general practice?

Rita Santos, Giuseppe Moscelli, Hugh Gravelle (CHE), Carol Propper (Imperial College London)

Funder: Department of Health



Walk-in Centres and use of Ambulatory Emergency Departments for minor conditions

Hugh Gravelle, Rita Santos, Karin Dalum



Competition price and quality: Australian GPs

Hugh Gravelle (CHE), Melbourne Institute

Funder: Australian Research Council



NIHR Doctoral Research Fellowship

Measuring and explaining variations in general practice performance
Rita Santos

Funder: NIHR DRF



Drivers of variation in ambulatory care sensitive condition emergency admissions, and of related mortality and health related quality of life (HQoL) outcomes

Hugh Gravelle, Rita Santos (CHE), Stephen Martin (Department of Economics and Related Studies, York)

Funder: Department of Health

SOCIAL AND HEALTH CARE

Examining variations in costs in the hip fracture care pathway

Adriana Castelli, Rowena Jacobs, Panos Kasteridis, Andrew Street (CHE), Silvio Daidone (UN Food and Agriculture Organization)

Funder: Department of Health

Understanding financial mechanisms for integrating funds for health and social care

Anne Mason, Maria Goddard, Helen Weatherly

Funder: Department of Health



Higher quality primary care for people with dementia: the effects on hospital admissions, length of stay and discharge to nursing homes

Anne Mason, Panos Kasteridis, Rowena Jacobs, Maria Goddard, Rita Santos

Funder: Department of Health



Hospital competition and quality

Hugh Gravelle, Giuseppe Moscelli, Rita Santos (CHE), Luigi Siciliani (Department of Economics and Related Studies, York)

Funder: Department of Health



Year of care funding model for long-term conditions

Andrew Street, Anne Mason, Panos Kasteridis (CHE), Jose-Luis Fernandez (London School of Economics), Julien Forder (University of Kent)

Funder: Department of Health



Testing the bed-blocking hypothesis: delayed hospital discharges and the supply of nursing and care homes

James Gaughan, Hugh Gravelle (CHE), Luigi Siciliani (Department of Economics and Related Studies, York)

Funder: Department of Health



Provision of informal care in England: exploring geographical and cultural associations and neighbourhood characteristics to inform policy

Adriana Castelli, Rita Santos, Bernard van den Berg (CHE), Kate Baxter (Archaeology Department, York)

Funder: University of York Research Priming Fund



Collaborative care in South Somerset (the Symphony Project)

Adriana Castelli, Rita Santos, Bernard van den Berg (CHE), Kate Baxter (Archaeology Department, York)

Funder: Department of Health

OTHER PROJECTS

Factors affecting the relative effectiveness of medicines in the EU

Anne Mason, in collaboration with Adrian Towse (OHE)

Funder: Pfizer



Indices of deprivation

Richard Cookson, Nils Gutacker (CHE), Karen Bloor (Department of Health Sciences, York), Tom Smith (Oxford Consultants for Social Inclusion (OSCI))

Funder: Department of Communities & Local Government



Production of evidence syntheses for the HS&DR programme

Andrew Street (Led by Alison Eastwood, Centre for Reviews and Dissemination, York)

Funder: NIHR HS&DR

RESEARCH PROJECTS

IN PROGRESS AND COMPLETED IN 2014

HEALTH, ECONOMETRICS AND DATA GROUP (HEDG)

Cross-country comparison of health inequality where the health measure is ordinal: does the approach to measurement matter?

Nigel Rice (CHE), Pedro Rosa Dias (University of Sussex), Silvana Robone (University of Bologna, Italy)

Funder: ESRC

Comparison of estimators for health care cost regression: a quasi-experiment approach

Andrew Jones (Department of Economics and Related Studies, York), James Lomas, Nigel Rice (CHE)

Funder: ESRC; Royal Economics Society

Healthcare cost regressions: going beyond the mean to estimate the full distribution

Andrew Jones (Department of Economics and Related Studies, York), James Lomas, Nigel Rice (CHE)

Funder: ESRC; Royal Economics Society

A dynamic structural model of lifetime smoking consumption, health and addiction

Andrew Jones (Department of Economics and Related Studies, York), Audrey Laporte (University of Toronto, Canada), Nigel Rice (CHE), Eugenio Zucchelli (University of Lancaster)

Funder: ESRC

Time and chance happen to them all? Duration modelling versus lifetime incidence of cancer

Daniel Howdon

Funder: ESRC

An empirical model of smoking, cancer, and mortality: new evidence on the social gradient in cancer

Daniel Howdon (CHE), Andrew Jones (Department of Economics and Related Studies, York)

Funder: ESRC

Mis-reporting, adaptation and anchoring the implications for self-assessed health

Paula Lorgelly (Monash University, Australia), Bruce Hollingsworth (University of Lancaster), Mark Harris (The University of New South Wales, Australia), William Greene (New York University, USA), John Wildman (Newcastle University), Nigel Rice (CHE)

Funder: Australian Research Council Discovery Grant



Health care expenditures, age, proximity to death and morbidity: implications for an ageing population

Daniel Howdon, Nigel Rice

Funder: Department of Health



Exploring trends in health care expenditures over time

Jose Maria Aragon, Martin Chalkley, Daniel Howdon, Nigel Rice

Funder: Department of Health



Health shocks and labour market transitions

Andrew Jones (Department of Economics and Related Studies, York), Nigel Rice (CHE), Francesca Zantomio (Ca' Foscari University of Venice, Italy)

Funder: Alan Williams Fellowship



Commuting and well-being in the UK

Luke A. Munford (University of Manchester), Nigel Rice (CHE), Jennifer Roberts (University of Sheffield)



Job strain and risky behaviours: do workers self-medicate?

Michael Darden (Tulane University, USA), Andrew Jones (Department of Economics and Related Studies, York), Nigel Rice (CHE)



Information and value based commissioning

Martin Chalkley, Maria Jose Aragon

Funder: NIHR



Understanding comparative growth in emergency admissions in Scotland and England, 2001/2-11/12

Martin Chalkley, Maria Jose Aragon

Funder: Department of Health



Rowena Jacobs



Anne Mason



Panos Kasteridis



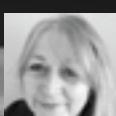
Nils Gutacker



Valerie Moran



Christoph Kronenberg



Maria Goddard



Hugh Gravelle



Nigel Rice



Rita Santos



Beatriz Rodriguez



MENTAL HEALTH ECONOMICS AND POLICY

It is important to CHE that our research addresses questions of importance to society. Our growing portfolio of research in the area of mental health economics and policy provides ample opportunity to do this. Mental health problems are the largest single cause of disability, representing a quarter of the national burden of ill-health, and are the leading cause of sickness absence in the UK. It is estimated that mental health problems cost the country as much as £100 billion each year – including the costs to individuals and society of treating preventable illness, the impact on quality of life, lost working days and lost income. There is a large ‘treatment gap’ with most people with mental health problems receiving no treatment and with severe funding restrictions compared with physical health services. People with mental illness die on average 15-20 years earlier than other people – one of the greatest health inequalities in England.

CHE is developing a body of research that is contributing to a better understanding of the nature of the treatment received by people with mental illness, health inequalities in treatment rates, socio-economic determinants of mental illness and funding of mental health services.

We are investigating the care which people with serious mental illness such as schizophrenia and bipolar disorder receive in primary care, under the auspices of two NIHR grants. In England, GPs play a central role in the care of most people with serious mental illness, with 57% of people with schizophrenia and 38% of people with bipolar disorder treated in primary care with little or no contact with secondary care services. GPs receive financial rewards for achieving specific quality targets for serious mental illness patients which cover both their mental and physical health care. We examine the link between the quality of primary care received and utilisation of secondary care, morbidity, mortality and costs.

Our research also addresses care for people with dementia. Dementia has been described by the British Prime Minister as “one of the biggest challenges we face today” and is a top policy priority. At any one time, a quarter of acute hospital beds in England are occupied by people with dementia. Poor co-ordination between primary, secondary and social care, can lead to cost shifting and ‘problem dumping’ – a major

cause of poor care and inefficiency and a key factor in triggering avoidable admissions. Our research investigates the impact of better quality of care provided by the GP practice on hospital admissions, length of stay and discharge to a care home.

In addition to looking at treatment and care, it is important to understand more about the causes of poor mental health which can inform the organisation of care services. Our research investigates the impact of employment related factors (such as on-the-job training), on mental health as well as socio-economic factors such as income. We also examine state dependence in mental health which aims to understand why some individuals endure poor mental health over a long period of time.

In the current economic climate, it is vital to understand the factors influencing the relative performance of mental health providers, in terms of resources used and outcomes achieved for patients. In England, funding for mental health care services is moving away from block contracts to a prospective activity-based payment system based on patient needs. We examine the incentive effects of the financing system and the potential impact for providers, commissioners, and ultimately recipients, of mental health services.

CHE offers a wide-ranging programme of workshops and courses in methodological and applied topics for members of the health economics field, including health economists, health care professionals and students. In 2014, around 300 people from 33 different countries took part in our courses.

Details of 2015 courses are available at:
<http://www.york.ac.uk/che/courses/short/>

YORK EXPERT WORKSHOPS IN THE SOCIO ECONOMIC EVALUATION OF MEDICINES

To inform and promote understanding in key areas of quality of life assessment and health economic evaluation and to learn how to:

- decide whether a particular evaluation is necessary
- choose a particular methodology
- identify the data required and appropriate instruments for data collection
- undertake appropriate analysis
- communicate the results effectively

There are three different York Expert Workshop courses:

- **Outcome measurement and valuation for health technology assessment:**
Revised and updated for 2014, this three-day workshop includes new material linked directly to the needs of organisations, such as NICE, which make decisions about health care delivery and funding.
- **Foundations of economic evaluation in health care:**
This five-day workshop comprehensively covers all key issues in the methodology and practice of economic evaluation.
- **Advanced methods for cost-effectiveness analysis:**
A five-day workshop dealing with advanced methods in cost-effectiveness analysis for pharmaceuticals and other health care technologies.

DECISION ANALYTIC MODELLING FOR ECONOMIC EVALUATION

Foundations course:

This two-day course provides an introduction to the principles and practice of decision analysis in economic evaluation.

Advanced course:

This three-day course covers the principles and practice of advanced topics including adding the dependent transition probabilities in Markov models using survival analysis and probabilistic analysis.

These two courses are run jointly between CHE, University of York and the University of Glasgow, for people currently undertaking health economic evaluations in academia, the pharmaceutical/medical device industry and consultancy.

REGRESSION METHODS FOR HEALTH ECONOMIC EVALUATION

This three-day course is intended for people currently undertaking health economic evaluations within the pharmaceutical and medical device industries, consultancy, academia or the health service who wish to learn how to use regression methods to analyse individual patient-level cost, effect and cost-effectiveness data.



ANALYSING PATIENT DATA USING HOSPITAL EPISODE STATISTICS (HES) TO EVALUATE HEALTHCARE POLICY AND PRACTICE

This course includes instruction on how to understand, manage and manipulate the data, construct and analyse key variables such as waiting times or length of stay and link inpatient and outpatient HES records together and

to other datasets. Delegates analyse individual patient records defined as Finished Consultant Episodes, Provider Spells and Continuous Inpatient Spells, monitor emergency readmissions and aggregate data by Healthcare Resource Group, hospitals, and groups of general practices. Evaluation of Patient Reported Outcome Measures (PROMs) and the use of data for benchmarking and policy evaluation are also covered.

HEALTH ECONOMICS BY DISTANCE LEARNING

- 1 Postgraduate Certificate in Health Economics for Health Care Professionals
- 2 Postgraduate Diploma in Health Economics for Health Care Professionals
- 3 MSc in Economic Evaluation for Health Technology Assessment

We offer three programmes (as above) with the aim of providing students with the skills and confidence to apply the principles of health economics within the workplace. Each programme takes a minimum of a year to complete. All applicants must complete the Postgraduate Certificate in the first instance. Both the Postgraduate Certificate and the Postgraduate Diploma in Health Economics for Health Care Professionals should be completed before progressing to the Postgraduate MSc in Economic Evaluation for Health Technology Assessment and progression is dependent on performance.

The programmes, which began in 2000, are a collaboration between the Department of Economics and Related Studies, the Centre for Health Economics and the York Health Economics Consortium. For further details see http://www.york.ac.uk/economics/postgrad/distance_learning/ or email carie.taylor@york.ac.uk

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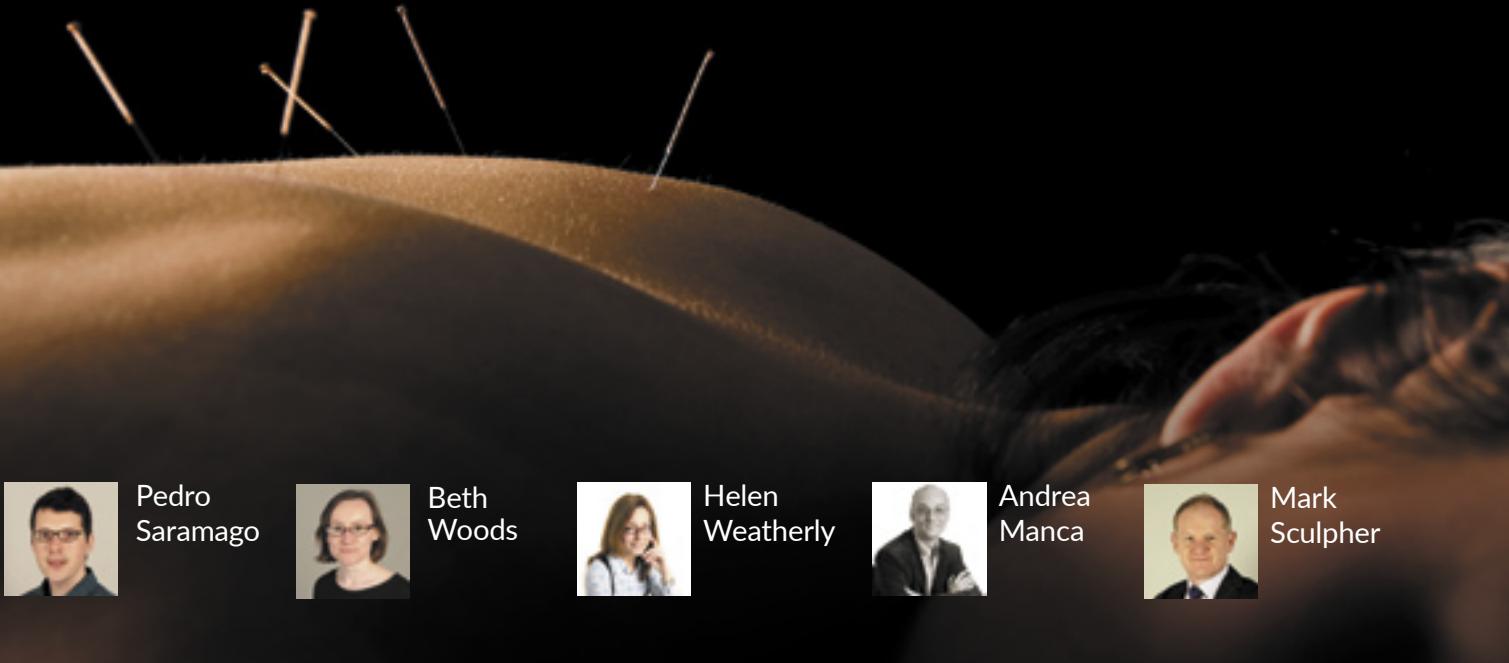
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Pedro
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ACUPUNCTURE FOR USE IN CHRONIC PAIN – NEW METHODS AND APPLICATIONS

Researchers at CHE, in collaboration with Hugh McPherson and other colleagues in the Department of Health Sciences, undertook two analyses to examine the clinical and cost-effectiveness of acupuncture for use in chronic pain in primary care. The research study used network meta-analysis, a methodology for synthesising trials comparing different sets of treatment. Where possible, data from individual patients (rather than data available from published reports) were accessed and used, as this data enhances the reliability of pooled analyses.

Increasingly acupuncture is used in primary care to alleviate pain in chronic conditions. Currently there is a lack of agreement about the value of acupuncture as a treatment for chronic pain, as reflected in debates about recent UK NICE guidance on the use of acupuncture. To date, the evidence base about the effectiveness and cost-effectiveness of acupuncture is not well established, and the analyses that have been undertaken include only a subset of the available evidence. The aim of our research was to assess the cost-effectiveness of acupuncture for chronic pain in primary care by drawing on relevant evidence, including recent high-quality trials.

The first analysis synthesised evidence from 28 high-quality randomised controlled trials (RCTs) of acupuncture in chronic musculoskeletal pain related to neck, shoulder and low back, osteoarthritis of the knee and headache and migraine, involving nearly 18,000 patients. New Bayesian network meta-analytic methods were developed for synthesising continuous health related quality of life (HRQoL) outcome data using individual-level data. The data were reported for a wide range of measures of HRQoL and were synthesised using standardisation and mapping approaches. Results of the analyses showed acupuncture to be more effective than usual care in reducing pain and improving HRQoL in patients across all of the pain conditions examined. Additionally, the research illustrated the importance of access to data from individual patients and suggests that more effort should be made to share and develop repositories for data in this format.

The second analysis synthesised evidence from 88 high-quality RCTs of acupuncture in osteoarthritis of the knee, involving over 7,500 patients. Access to data from individual patients was not possible for all studies included in this analysis. Methods were therefore developed to combine individual patient data where this was available with published summary data where it was not. The network meta-analysis conducted informed a full cost-effectiveness analysis of 19 adjunct non-pharmacological interventions for osteoarthritis of the knee. Due to the variable quality of the trials included in the analysis, separate analyses were conducted including all trials and restricting the analysis to better quality trials. The analysis found transcutaneous electrical stimulation to be cost-effective at a threshold of £20,000 per QALY when all evidence was synthesised, irrespective of quality. When the analysis was restricted to trials of higher quality, acupuncture was considered cost-effective.

These analyses provide the most robust evidence from high quality trials on acupuncture for chronic pain in the three conditions examined. The research showed that acupuncture improved HRQoL more than usual care for different chronic pain types. It also showed that acupuncture is one of the more effective physical therapies for knee osteoarthritis in terms of clinical effectiveness and, when considering only higher quality trials, it is also cost-effective. The research included the development and application of new methods which can be applied elsewhere.

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- 95 Network meta-analysis of (individual patient) time to event data alongside (aggregate) count data – **Pedro Saramago, Ling-Hsiang Chuang and Marta Soares**.
- 96 The importance of multimorbidity in explaining utilisation and costs across health and social care settings: evidence from South Somerset's Symphony Project – **Panos Kasteridis, Andrew Street, Matthew Dolman, Lesley Gallier, Kevin Hudson, Jeremy Martin and Ian Wyer**.
- 97 Financial mechanisms for integrating funds for health and social care: an evidence review – **Anne Mason, Maria Goddard and Helen Weatherly**.
- 98 Using cost-effectiveness thresholds to determine value for money in low-and middle-income country healthcare systems: are current international norms fit for purpose? – **Paul Revill, Simon Walker, Jason Madan, Andrea Ciaranello, Takondwa Mwase, Diana M Gibb, Karl Claxton and Mark J Sculpher**.
- 99 WHO decides what is fair? International HIV treatment guidelines, social value judgements and equitable provision of lifesaving antiretroviral therapy – **Paul Revill, Miqdad Asaria, Andrew Phillips, Diana M Gibb and Charles F Gilks**.
- 100 The impact of diabetes on employment in Mexico – Till Seuring, Yevgeniy Goryakin and **Marc Suhrcke**
- 101 Addressing missing data in patient-reported outcome measures (PROMs): Implications for comparing provider performance – Manuel Gomes, **Nils Gutacker, Chris Bojke and Andrew Street**.
- 102 Testing the bed-blocking hypothesis: does higher supply of nursing and care homes reduce delayed hospital discharges? – **James Gaughan, Hugh Gravelle and Luigi Siciliani**
- 103 The costs of specialised care – **Chris Bojke, Katja Grašič and Andrew Street**.
- 104 Understanding the differences in in-hospital mortality between Scotland and England – **Maria Jose Aragon and Martin Chalkley**.
- 105 The impact of hospital financing on the quality of inpatient care in England – Stephen Martin, **Andrew Street, Lu Han and John Hutton**.
- 106 Patient choice and the effects of hospital market structure on mortality for AMI, hip fracture and stroke patients – **Hugh Gravelle, Giuseppe Moscelli, Rita Santos** and Luigi Siciliani.



A YEAR IN THE LIFE OF TWO PhD STUDENTS IN CHE

CHEN CHEN

In 2014, as a second year PhD student, I focused on two chapters of my thesis concerning the Chinese health insurance market. The first chapter is examining whether there is adverse or advantageous selection in the Chinese private health insurance market. For the non-public insurance subgroup there was adverse selection. If people's expected medical expenditure is greater than the premium of private insurance, their probability of buying private insurance is higher. For the public insurance subgroup, there was advantageous selection. The second chapter looks at the topic of moral hazard and universal coverage, and I found that having public insurance increases medical expenditure.

During the year, I got the opportunity to attend and present at seminars and conferences and was able to present my first chapter at the 2014 International Health Economics Association (iHEA) conference in Dublin where I received good comments and feedback. As a member of the Health Econometrics and Data Group (HEDG) at the University of York, I attend seminars on a weekly basis and presented my research at one of them.

CHE and the Department of Economics & Related Studies (DERS) also give PhD students the opportunity to teach. I tutored in the 'Outcome Measurement and Valuation for Health Technology Assessment' York Expert Workshop for CHE and, as a teaching fellow in DERS, I was in charge of seminars for a third year course 'Applied Economics' where I led seminars and marked assignments. Both teaching opportunities were very worthwhile and provided invaluable experience of working with students of varying ages and expertise.

JAMES LOMAS

2014 was the writing up year of my PhD and turned out to be immensely productive and rewarding. I had been awarded a Junior Fellowship by the Royal Economic Society, which meant that I could focus solely on my thesis research. By this stage I had more or less completed the first two chapters of my PhD, which considered the econometric methods available for analysing healthcare cost data (using Hospital Episode Statistics to provide the basis for costs).

I had been fortunate enough to visit the University of Wisconsin-Madison in 2012, and some of the discussions that I had had there with Professor John Mullahy and Professor David Vanness had continued to occupy my mind relating to looking at the distribution of a variable beyond its mean. This would form the basis of the research question that I tackled in my final chapter. My supervisors, Professor Andrew Jones (DERS) and Professor Nigel Rice (CHE), had a wealth of knowledge in methods that could fit the entire distribution. Some of these methods had been used with healthcare costs, but had never been compared to other methods in order to work out which method performed the best.

2014 was also busy due to my continued work as a Teaching Fellow in DERS, and a number of fantastic opportunities to present my work. I was able to present one of my earlier chapters in the Virtual Research Seminar hosted by HERG Brunel, and in person at HERC in Oxford. Later in the year I would present my final chapter at the European Workshops on Econometrics and Health Economics in Starnberg, and the Annual Health Econometrics Workshop in Toronto. These conferences were hugely valuable as the methods used in my paper, and the focus on the increasingly policy-relevant distribution, generated a lot of interest and discussion.

PRESENTATIONS 2014



Ana Duarte and Rita Faria with São Paulo course participants

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Jacobs R. Does higher quality primary care for people with serious mental illness affect hospital admission? *Improving Mental Health: How Community and Primary Care Services can support better mental health outcomes? Kings Fund Conference, London, UK*. February 2014.

•••
Jacobs R. Does higher quality primary care for people with serious mental illness affect hospital admissions and resource use? *Department of Economics, Ca'Foscari University of Venice, Italy*. May 2014.

•••
Kasteridis P. An empirical strategy to support the development of integrated health and social care. *iHEA, 10th World Congress, Dublin, Ireland*. July 2014.

•••
Kronenberg C. Mental health benefits from work-related training? *German Health Economics Conference, Munich, Germany*. March 2014.

•••
Kronenberg C. Mental health benefits from work-related training? *3rd White Rose DTC Conference, Sheffield, UK*. April 2014.

•••
Kronenberg C. Mental health benefits from work-related training? *Leeds Social Science Institute, University of Leeds, Leeds, UK*. April 2014.

•••
Kronenberg C. Mental health benefits from work-related training? *Rheinisch-Westfälisches Institut für Wirtschaftsforschung, Essen, Germany*. April 2014.

Lomas J. A quasi-Monte Carlo comparison of developments in parametric and semi-parametric regression methods for heavy tailed and non-normal data: with an application to healthcare costs. *HERG Virtual Research Seminar, Brunel University, London, UK*. January 2014.

•••
Lomas J. A quasi-Monte Carlo comparison of developments in parametric and semi-parametric regression methods for heavy tailed and non-normal data: with an application to healthcare costs. *HERC Seminar, University of Oxford, Oxford, UK*. March 2014.

•••
Lomas J. Going beyond the mean in healthcare cost regressions: a comparison of methods for estimating the full conditional distribution. *Annual Health Econometrics Workshop, University of Toronto, Canada*. September 2014.

•••
Lomas J. Going beyond the mean in healthcare cost regressions: a comparison of methods for estimating the full conditional distribution. *European Workshops on Econometrics and Health Economics, University of Munich and Max Planck Institute for Social Law and Social Policy, Germany*. September 2014.

•••
Ochalek J. Labour market effects of HIV/AIDS in low-income settings. An invitational workshop on Work and Health. *The Utrecht University School of Economics, The Netherlands*. November 2014.

•••
Mason A. Financial mechanisms for integrating funds across health & social care. Do they enable integrated care? *14th International Conference on Integrated Care, Brussels, Belgium*. April 2014.

•••
McKenna C. The health benefits of additional evidence. *Cochrane UK & Ireland Annual Symposium, Manchester, UK*. April 2014.

•••
McKenna C. Value of information analysis for establishing the expected health benefits of additional evidence. *Campbell Collaboration Colloquium, Belfast, UK*. June 2014.

•••
Moscelli G. Hospital quality and competition with fixed prices. *HEDG Seminar, University of York, York, UK*. January 2014.

•••
Moscelli G. Patient choice and the effects of hospital market structure on mortality for AMI, hip fracture and stroke patients. *Sixth Italian Congress of Econometrics and Empirical Economics (ICEEE 2015), Salerno, Italy*. January 2014.

•••
Moscelli G., Siciliani L., Gutacker N., Cookson R. Income-related inequality in hospital waiting times for cardiac revascularization: allowing for selection bias due to choice of treatment and hospital. *Health Economists' Study Group, Leeds, UK*. January 2014.

•••
Moscelli G. Income-related inequality in hospital waiting times for cardiac revascularization. *HEDG Seminar, University of York, York, UK*. May 2014.

•••
Rice N. Response consistency and vignette equivalence in the Hopit model: a Monte-Carlo study. *5th Biennial Conference of the American Society of Health Economists, The University of Southern California, USA*. June 2014.

Rice N. A quasi-Monte Carlo comparison of developments in parametric and semi-parametric regression methods for heavy tailed and non-normal data: with an application to healthcare costs. *4th Italian Health Econometrics Workshop, Padua, Italy*. July 2014.

•••
Rice N. Age, proximity-to-death and morbidity: impact on health care expenditures. *Department of Health, Quarry House, Leeds, UK*. October 2014.

•••
Santos R, Gravelle H, Propper C. Does quality affect patients' choice of doctor? Evidence from the UK. *Australasian Health Econometrics Workshop, Perth, Australia*. March 2014.

•••
Santos R. Does quality affect patients' choice of doctor? Evidence from England. *iHEA, 10th World Congress, Dublin, Ireland*. July 2014.

•••
Santos R. Does quality affect patients' choice of doctor? Evidence from the UK. *Twenty Third European Workshop on Econometrics and Health Economics, Starnberg, Munich, Germany*. September 2014.

•••
Santos R. Does quality affect patients' choice of doctor? Evidence from England. *Applied Health Econometrics Symposium in Leeds, UK*. October 2014.

•••
Saramago P. Synthesising individual-level data for decision making in healthcare: challenges from a set of case studies. *The Biostatistics group at the University of Leicester, UK*. October 2014.

•••
Sculpher M. Value based pricing: providing evidence for a policy initiative. Invited presentation to the *Department of Health's Policy Research Units Annual Directors' Meeting, London, UK*. January 2014.

•••
Sculpher M. Societal perspective in economic evaluation: easier said than done? Invited presentation at the *Swedish Health Economics Association meeting, Lund, Sweden*. March 2014.

•••
Sculpher M. Scoping study to inform resource allocation in health and social care. Background and Analytical Framework Presentation to a workshop entitled 'Research to inform resource allocation in health and social care', *Department of Health, London, UK*. May 2014.

•••
Sculpher M. Decision analytic modelling and its role in diagnostics. Invited presentation to the *National Institute for Health and Care Excellence Diagnostics Advisory Group, Manchester, UK*. May 2014.

•••
Sculpher M. Where might MCDA fit into analyses to support decision making? *Issues Panel, ISPOR, Montreal, Canada*. June 2014.

•••
Sculpher M. Sufficient evidence for decisions: comparing costs and benefits of further research. *Issues Panel, ISPOR, Montreal, Canada*. June 2014.

Sculpher M. Gates reference case – core principles. *Presentation at workshop to launch the Gates Reference Case for Economic Evaluation, London, UK*. June 2014.

•••

Sculpher M. What is cost-effectiveness analysis? Invited presentation at the *National Institute for Health and Care Excellence for the Ghana Study Tour, London, UK*. August 2014.

•••

Sculpher M. What should be the role of CEA? A non-US perspective. Invited presentation at symposium entitled 'What should the role of CEA be in health policy and medical decision making?' organised by the *Society for Medical Decision Making, Miami, USA*. October 2014.

•••

Sculpher M. Health technology assessment: Priorities for methods development. Invited presentation at the *Spanish Association for Health Technology Assessment, Barcelona, Spain*. November 2014.

•••

Sculpher M. Comparative effectiveness research: An economist's perspective. Invited presentation at the *Spanish Association for Health Technology Assessment, Barcelona, Spain*. November 2014.

•••

Sculpher M, Saramago P, Soares M, Faria R, Duarte A (CHE), Briggs A (University of Glasgow). Three-day course 'Decision analytic modelling for economic evaluation in health'. *Rio de Janeiro, Brazil*, November 2014.

•••

Spackman E. Off-label comparators in HTA. *Fourth International Conference, Evidence Based Decision Making in Central Eastern Europe Health Care, Belgrade, Serbia*. May 2014.

•••

Spackman E. Expected value of perfect information: Active learning through user friendly computations, displays and application discussions. *ISPOR, Montreal, Canada*. June 2014.

•••

Spackman E. Good research practices for cost-effectiveness analysis alongside clinical trials. *Novo Nordisk, Copenhagen, Denmark*. June 2014.

•••

Spackman E. Value based pricing, estimating the cost-effectiveness threshold and determining the need for further evidence. *University of British Columbia, Canada*. October 2014.

•••

Spackman E. Methods and practicalities of health care decision making in the UK. *University of Calgary, Canada*. October 2014.

•••

Spackman E. Value based pricing: the UK experience. *University of Granada, Spain*. December 2014.

•••

Stewart L, **Woods B**, Grueger J, Boysen M. How can HTA benefit from increased data transparency? *ISPOR 17th Annual European Congress, Amsterdam, The Netherlands*. November 2014.

•••

Street A. Variations in costs and patient reported outcomes in England. *University of Hamburg, Germany*. January 2014.

•••

Street A. Variations in costs and patient reported outcomes in England. *University of Barcelona, Spain*. February 2014.



Teaching group in Rio de Janeiro, Brazil

Street A. Variations in costs and patient reported outcomes in England. *University of Southern Denmark, Odense, Denmark*. April 2014.

Street A. The importance of multi-morbidity in explaining utilisation and costs across health and social care settings. *Centre for Health Economics, University of York, York, UK*. April 2014.

Street A. Addressing missing data in patient-reported outcome measures (PROMs): implications for the use of PROMs for comparing provider performance. *XXXIV Spanish Health Economics Association Conference, Pamplona, Spain*. May 2014.

Street A. Addressing missing data in patient-reported outcome measures (PROMs): implications for the use of PROMs for comparing providing performance. *iHEA, 10th World Congress, Dublin, Ireland*. July 2014.

Street A. Multi-morbidity matters! Explaining utilisation and costs across health and social care settings. *Danish Regional Authorities, Copenhagen, Denmark*. September 2014.

Street A. Multi-morbidity matters! Explaining utilisation and costs across health and social care settings. *Faircare workshop: New Trends in Health Equity Research. The Department of Business and Economics and the Centre of Health Economics Research at University of Southern Denmark, Odense, Denmark*. September 2014.

Street A. How much has NHS productivity changed over time? *Association of Anaesthetists of Great Britain and Ireland Annual Congress, Harrogate, UK*. September 2014.

Street A. How much has NHS productivity changed over time? *College Officers' forum, Royal College of Physicians, London, UK*. September 2014.

•••
Street A. Paying for hospital specialist care. *Hospinnomics Launch Event, Paris, France*. September 2014.

•••
Street A. The Symphony Project: person-centred, co-ordinated care in South Somerset. *The King's Fund Integrated Care Summit, London, UK*. October 2014.

•••
Street A. Multi-morbidity matters! Explaining utilisation and costs across health and social care settings. *University of Southampton, Southampton, UK*. November 2014.

•••
Street A. Reasons for variations in hospital outcomes: do costs have an influence? *First Conference of the Austrian Health Economics Association, Vienna, Austria*. November 2014.

•••
Street A. Pricing revisions for specialised and complex care. *Presentation to Monitor's Pricing Team, London, UK*. December 2014.

•••
Street A. Commissioning for integrated care: Understanding capitated budgets. *Somerset Clinical Commissioning Group, Monitor and NHS England, Taunton, UK*. December 2014.

•••
van den Berg B. Complementarity and substitutability between informal care and formal health and long term care services. *iHEA, 10th World Congress, Dublin, Ireland*. July 2014.

•••
van den Berg B. The benefits of long term care. *iHEA, 10th World Congress, Dublin, Ireland*. July 2014.

•••
Walker S. Cost-effectiveness, uncertainty and value of information analysis for medical devices. *iHEA, 10th World Congress, Dublin, Ireland*. July 2014.

•••
Walker S. Cost-effectiveness analysis of protease inhibitor monotherapy vs. ongoing triple-therapy in the long-term management of HIV patients. *HIV Drug Therapy 2014, Glasgow, UK*. November 2014.

•••
Weatherly H. Optimising the use of data in assessing the cost-effectiveness of acupuncture: opportunities and challenges. *HTAi, Washington, USA*. June 2014.

•••
Weatherly H. Methodological considerations and issues in the economic evaluation of long-term care interventions. *iHEA, 10th World Congress, Dublin, Ireland*. July 2014.

•••
Woods B. Are we really including all relevant evidence? Considerations for network meta-analysis. *Centre for Health Economics, University of York, York, UK*. March 2014.

•••
Woods B. Introduction to survival data and overview of approaches to synthesis. *InterTASC meeting, University of York, York, UK*. October 2014.

HONORARY FELLOWS AND VISITORS

PROFESSORS, FELLOWS AND VISITORS

HONORARY PROFESSORS

- **Roy Carr-Hill**
...
- **Nancy Devlin**
...
- **Paul Kind**
...
- **Peter C Smith**

HONORARY VISITING FELLOWS

- **Marco Barbieri**
...
- **David Epstein**
...
- **Jon Sussex**

VISITORS TO CHE DURING 2014

- **Silvio Daidone**
Economist, The Food and Agriculture Organisation of the United Nations, Rome
March 2014
...
- **Manuel Espinoza**
Pontificia Universidad Católica de Chile
June – July 2014
...
- **Adam Formby**
PhD student, Social Policy and Social Work, University of York
January – April 2014
...
- **Hendrik Juerges**
University of Wuppertal, Germany
September – November 2014
...
- **Jonathan Karon**
Aalborg University, Denmark
October 2013 – March 2014
...
- **Lars Oddershede**
Aalborg University, Denmark
October 2013 – March 2014

- **Kasper Olsen**
University of Southern Denmark
January – May 2014
...
- **Luz María Peña-Longobardo**
University of Castilla-La Mancha, Spain
September 2014 – January 2015
...
- **France Portrait**
VU University Amsterdam
February 2014
October – November 2014
...
- **Silvana Robone**
University of Bologna, Italy
January 2014
...
- **Lise Rochaix**
College of Haute Autorite de Sante
February 2014
...
- **Josselin Thuilliez**
Centre d'économie de la Sorbonne, Paris
April 2014
...
- **Lau Caspar Thygesen**
University of Southern Denmark
October 2014
...
- **Haitham Tuffaha**
Griffith University, Australia
November – December 2014

ALAN WILLIAMS FELLOWS

FELLOWSHIP AWARDS 2014

- **Francesca Zantomio**
- **Hossein Afzali**

The Alan Williams Fellowships scheme was first launched in 2006 as a tribute to Professor Alan Williams and to enable health economists from anywhere in the world to spend time at the Centre for Health Economics in York, UK.

In 2014, **Francesca Zantomio**, from Ca' Foscari University of Venice, and **Hossein Afzali**, from The University of Adelaide

were awarded Fellowships to visit CHE in 2014 and 2015. Francesca Zantomio's research project was 'Labour supply responses to acute health shocks: the role of shock-induced impairments and job characteristics'. Hossein Afzali's research topic when he visits in 2015 will be 'A critical review of decision analytic models submitted to PBAC and NICE: need for disease-specific (reference) models'.

PAST FELLOWS

- **Mikael Svensson**
April – June 2014
...
- **Peter Sivey**
April – June 2014
...
- **Line Kongstad**
November 2012 – February 2013
...
- **Cinzia Di Novi**
November 2011 – April 2012
...
- **Rena Conti**
May – June 2009
...
- **Anirban Basu**
April – June 2008
...
- **Ismo Linnosmaa**
Feb – July 2008
...
- **Matteo Galizzi**
2007 & 2008
...
- **Giuliana de Luca**
August – December 2007
...
- **Aleksandra Torbica**
June – September 2007
...
- **Victor Zarate**
January – April 2007

RESEARCH STAFF

- **Maria Goddard**
Professor and Director of CHE
•••
- **Shehzad Ali**
Research Fellow
•••
- **Maria Jose Aragon**
Research Fellow
•••
- **Miqdad Asaria**
Research Fellow
•••
- **Chris Bojke**
Senior Research Fellow
•••
- **Laura Bojke**
Senior Research Fellow
•••
- **Adriana Castelli**
Research Fellow
•••
- **Martin Chalkley**
Professor
•••
- **Karl Claxton**
Professor
•••
- **Richard Cookson**
Reader
•••
- **Michael Drummond**
Professor
•••
- **Ana Duarte**
Research Fellow
•••
- **Mark Dusheiko**
Senior Research Fellow
- **Rita Faria**
Research Fellow
•••
- **James Gaughan**
Research Fellow
•••
- **Christina Giannopoulou**
Career Development Intern
•••
- **Katja Grašič**
Research Fellow
•••
- **Hugh Gravelle**
Professor
•••
- **Susan Griffin**
Senior Research Fellow
•••
- **Nils Gutacker**
Research Fellow
•••
- **Sebastian Hinde**
Research Fellow
•••
- **Rowena Jacobs**
Professor
•••
- **Gurleen Jhuti**
Research Fellow
•••
- **Panos Kasteridis**
Research Fellow
•••
- **James Lomas**
PhD Student to Oct 2014; Research Fellow from Oct 2014
- **Andrea Manca**
Professor
•••
- **Anne Mason**
Senior Research Fellow
•••
- **Claire McKenna**
Senior Research Fellow
•••
- **Andrew Mirelman**
Research Fellow
•••
- **Giuseppe Moscelli**
Research Fellow
•••
- **Ryota Nakamura**
Research Fellow
•••
- **Jessica Ochalek**
Research Fellow
•••
- **Stephen Palmer**
Professor
•••
- **Thomas Patton**
PhD Student to Oct 2014; Research Fellow from Oct 2014
•••
- **Paul Revill**
Research Fellow
•••
- **Nigel Rice**
Professor
•••
- **Gerry Richardson**
Senior Research Fellow
- **Rita Santos**
Research Fellow
•••
- **Pedro Saramago Goncalves**
Research Fellow
•••
- **Mark Sculpher**
Professor
•••
- **Eleftherios Sideris**
Career Development Intern to Oct 2014; Research Fellow from Oct 2014
•••
- **Marta Soares**
Senior Research Fellow
•••
- **Eldon Spackman**
Research Fellow
•••
- **Andrew Street**
Professor
•••
- **Marc Suhrcke**
Professor
•••
- **Bernard van Den Berg**
Reader
•••
- **Simon Walker**
Research Fellow
•••
- **Helen Weatherly**
Senior Research Fellow
•••
- **Beth Woods**
Research Fellow

NEW RESEARCH STAFF



Andrew Mirelman
Research Fellow

Andrew is a Research Fellow in the Global Health Economics team. He joined CHE in the summer of 2014 and has a BSc in Biomedical Engineering from the University of Virginia, an MPH from Johns Hopkins Bloomberg School of Public Health (JHSPH) and a PhD in the Health Systems within the Department of International Health at JHSPH. Andrew's work focuses on health systems and economic issues in low and middle-income countries. He has worked in Bangladesh, Peru and China on non-communicable diseases and has a particular interest in population and burden modelling as well as economic evaluation of preventive interventions.



Jessica Ochalek
Research Fellow

Jessica Ochalek is a Research Fellow in the Team for Economic Evaluation and Health Technology Assessment (TEEHTA). She joined in 2014 after completing the MSc in Health Economics at the University of York. She also holds an MPH from Boston University and a BA in Global Studies from the University of Wisconsin – Milwaukee, and has experience working at OECD as well as the Center for Global Health and Development at Boston University. Her research interests are centred around the application of economic evaluation in low- and middle-income countries.



Beth Woods
Research Fellow

Beth is a Research Fellow in the Team for Economic Evaluation and Health Technology Assessment (TEEHTA). Prior

to joining CHE Beth was a Director in the Health Economics team at Oxford Outcomes, a private consulting firm, where she specialised in applied economic evaluation from 2006-2013. During this time Beth contributed to numerous submissions to the National Institute for Health and Care Excellence (NICE) and other national HTA agencies. Beth's research interests include the application of statistical and decision analysis methods to health technology assessment.



Ryota Nakamura
Research Fellow

Ryota is a Research Fellow working for the Global Health Economics team. He also serves as a Research Associate at the University of Cambridge and as a Visiting Associate Professor at the Institute of Statistical Mathematics, Japan. He is an applied microeconomist specialising in health. He holds a BA and an MA in Economics from Kyoto University and a PhD in Economics from the University of York. His research interests include empirical and theoretical investigations of health related behaviour and also of healthcare system to inform national and international public health policies. His current research focuses on testing and evaluating behavioural economic insights to prevent non-communicable diseases at the population level.



Marc Suhrcke
Professor

Marc is a Professor of Global Health Economics. He joined CHE in June 2014 and previously had worked at the University of East Anglia, Norwich, the World Health Organization, the UNICEF Innocenti Research Centre, the University of Hamburg, the European Bank for Reconstruction and Development, the Centre for European Policy Studies (Brussels), the European Commission (Brussels), and the Hamburg Institute for International Economics. The main part of his research revolves around a range of economic and econometric aspects of public health in low- and middle-income countries, which includes the micro and macroeconomic consequences of (ill-)health, the economic evaluation of public health interventions, the measurement of socioeconomic inequalities in – and determinants of – health, and empirical policy impact evaluation.



James Lomas

James Lomas and Thomas Patton, who were both PhD students in CHE, were appointed as Research Fellows in 2014.



Thomas Patton



Eleftherios Sideris

Eleftherios Sideris, previously a Career Development Intern, was appointed as a Research Fellow in 2014.

PhD STUDENTS

- **Estela Capelas Barbosa**
...
- **Chen Chen**
...
- **Daniel Howdon**
...
- **James Koh**
...
- **Christoph Kronenberg**
...
- **James Lomas**
...
- **Ronan Mahon**
...
- **Valerie Moran**
...
- **Thomas Patton**
...
- **Yeonsook Rho**
...
- **Idaira Rodriguez Santana**
...
- **Irene Sanchez**
...
- **Laetitia Schmitt**

NEW PhD STUDENTS



Dina Jankovic

Dina is a PhD student supervised by Laura Bojke and is affiliated with the Team for Economic Evaluation and Health Technology

Assessment (TEEHTA). Her research focuses on elicitation of experts' opinion as a tool for assessment of health technologies at early stages of development. Dina holds a Pharmacy degree from the University of Manchester and an MSc in Health Economics from the University of York.



Beatrix Rodriguez

Beatrix Rodriguez is a PhD student supervised by Bernard van den Berg, and is affiliated with the Team for Economic

Evaluation and Health Technology Assessment (TEEHTA). The focus of her doctoral research is "economic evaluation of people aged 65 and older with type 2 diabetes mellitus". Beatrix holds a Bachelor of Business Administration and Management from University Carlos III de Madrid, Spain and a MSc in Health Economics from the University of York.

RESEARCH FELLOWS ALSO REGISTERED FOR A PhD

- **Thomas Patton**
...
- **James Lomas**
...
- **Nils Gutacker**
...
- **James Gaughan**
...
- **Rita Santos**

CHE Facts & Figures

Over 45
economists
in CHE



ADMINISTRATIVE AND SUPPORT STAFF

INTERNAL AFFILIATES

◆ **Kerry Atkinson**

Administrator

•••

◆ **Linda Baillie**

Administrator

•••

◆ **Louise Campbell**

Administrator

•••

◆ **Gill Forder**

Publications Administrator

•••

◆ **John Galloway**

Computer Support Officer

•••

◆ **Liz Grant**

Finance and Research
Support Officer

•••

◆ **Ruth Helstrip**

Project Co-ordinator

•••

◆ **Vanessa King**

Administrator and
Assistant to the Director

•••

◆ **Gillian Robinson**

Administrator

•••

◆ **Frances Sharp**

Publications Manager

•••

◆ **Trish Smith**

Centre Manager

•••

◆ **Vanessa Wood**

Finance and Research
Support Co-ordinator

◆ **Tony Culyer**

(Department of Economics
& Related Studies)

•••

◆ **Cynthia Iglesias**

(Department of Health Sciences)

•••

◆ **Andrew Jones**

(Department of Economics
& Related Studies)

•••

◆ **Luigi Siciliani**

(Department of Economics
& Related Studies)

CHE Facts & Figures

Over 100
presentations
worldwide

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