

Health Economics Unit

Welcome to the Autumn 2016 edition of HEUnews!

For HEU staff, the post summer months have been action packed with the organisation and hosting of Conferences. Team members are currently busy making arrangements for the Health Economists' Study Group Meeting in January 2017 (see below). Be sure not to miss that early bird deadline. The International Priorities Conference, held in Birmingham's Medical School in September and jointly hosted by HEU and our colleagues in the Health Services Management Centre (HSMC), was a resounding success. The standard and breadth of the presentations across the conference was hugely inspiring. Inside we present an overview of some of the organised sessions from HEU's own staff.

Also inside, the research focus highlights the formal collaboration HEU holds with the Arthritis Research UK's Research Institute for Primary Care and Health Sciences at Keele University and presents an overview of some of the work being led by **Ray Oppong** (Page 2). Meanwhile **Lavanya Diwakar** presents an overview and update of her Wellcome Trust funded Fellowship on evaluating paediatric allergy pathways, also the basis of her doctoral research.

Finally, in this issue we celebrate the graduation of our MSc and PhD students in the summer and we are delighted to pay tribute to the achievement of so many of them in relation to publishing work from their MSc dissertations (see page 4). Christmas will be upon us soon so don't forget to register for HESG...



Tracy Roberts, Head of Unit

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What's new in HEU...

HESG 
.org.uk

HESG January 2017

HEU is the proud host of the Winter 2017 Health Economists' Study Group (HESG) meeting. The meeting, which will take place at Jury's Inn in central Birmingham between the 4th - 6th January 2017, aims to bring together researchers and policy makers with an interest in the economics of health and healthcare. The organising committee is currently in the process of finalising the meeting's programme.

The closing date for **Early Bird registration** is **18th November 2016**, while standard registration will be open until **9th December 2016**.

For further details, please visit the HESG Winter 2017 website at www.birmingham.ac.uk/facilities/mds-cpd/conferences/hesg-2017

Follow us on Twitter: @HESG_Bham_2017

Arthritis Research UK's Research Institute for Primary Care and Health Sciences

The Health Economics Unit is working closely with the Arthritis Research UK's Research Institute for Primary Care and Health Sciences at Keele University to provide health economics support in the design, management and analysis of projects in their portfolio of musculoskeletal work.

Dr Raymond Oppong is one of the researchers who work as part of this collaboration. His work, alongside colleagues **Sue Jowett** and **Jesse Kigozi**, involves evaluating the cost-effectiveness of interventions alongside trials led by the team at Keele. Current projects include the SUPPORT (subacromial impingement syndrome and pain: a randomised controlled trial of exercise and injection) and MOSAICS (management of osteoarthritis in consultations) trials. Raymond is actively involved in the design of study protocols for the economic analysis of trials and he is a trial management group member for trials, including INSTINCTS, which is focused on evaluating the effectiveness of injection and splinting for the treatment of carpal tunnel syndrome. He has been co-applicant on successful grant applications such as the FACTUAL study which looks at chondroitin sulphate for the treatment of hand osteoarthritis.



L-R: Ray, Sue, Jesse

Through his collaboration with Keele University, Raymond has developed an interest in methodological work related to the analysis of factorial and cluster trials, which he explored in his recently completed doctoral project. At Keele University, Raymond is also actively involved in delivering short courses and teaching health economics to undergraduate medical students.

Wellcome Trust Funded Research

Lavanya Diwakar is a Wellcome Trust funded Research Training Fellow in Health Economics. She has successfully completed her Higher Specialist Training in Immunology and is an honorary consultant at the Queen Elizabeth Hospital, Birmingham.

Lavanya's research is focussed on evaluating paediatric allergy pathways in the West Midlands and modelling cost-effective ways of delivering services. Her supervisors for this PhD project are **Professor Tracy Roberts** and Dr Carole Cummins. As part of the project, Lavanya is also collaborating with researchers at the University of Edinburgh and Imperial College London.

As part of this work, Lavanya assessed the burden placed by paediatric allergy on the NHS in the UK and the West Midlands between 2000-2012 using the Health Information Network (THIN) and the Hospital Episodes Statistics (HES) databases. This showed that while the incidence rates of most allergies were stable, the rates of anaphylaxis have been increasing. The number of children consulting GPs for allergies over this period was also stable, but despite this, prescription rates for most drugs increased.

In order to assess end user preferences for paediatric allergy services, parents accessing both primary and secondary care services for their child's allergy have been interviewed. Using attributes obtained from the analysis of the interviews, a discrete choice experiment is being planned which will help rank parent preferences for services in the West Midlands region.

Combining user preferences with data obtained from a survey regarding services offered in NHS hospitals in the West Midlands, this work will propose pathways that are clinically effective as well as cost-effective. It is anticipated that this project can help decision makers and clinical commissioners in improving paediatric allergy services in the region.



L-R: Lavanya, Tracy

Pelham's Pen

A man walks into a bank in London to ask for a loan of £5,000 to attend a Health Economics conference and other meetings on a two-week visit to New York. The bank, never having seen him before, asks for security for the loan and he offers to leave his car. This turns out to be a top of the range Rolls Royce, but he has all the necessary paperwork to prove that it is his, so they accept it as security and a bank employee drives it down into the vaults of the bank.

Two weeks later, the man returns and hands over the £5,000 plus £15.14 interest. While the car is being fetched, the bank manager says to the man: "We have been doing some checking up on you. You are a multi-millionaire in your own right, and Managing Director of a successful Health Economics consultancy firm. Why did you need to borrow £5,000 from us?"

At this, the man chuckles and says, "Well, of course I didn't; but where else in London can I leave my car for a fortnight, at a cost of just £15.14 and expect to find it still there when I got back?"

Seminar Series

The Health Economics Unit runs a seminar series at which speakers from around the UK and Europe present their work.

The next seminar will take place in 2017

9th February 2017

Andrea Manca

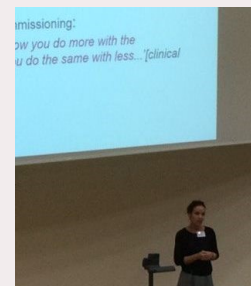
University of York

If you would like to attend any of these seminars or would like to contribute, please contact us via our email address.

Have you heard...

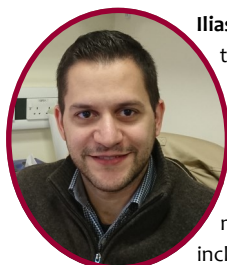
...about the organised sessions at Priorities 2016?

At the 'International Society on Priorities in Health Care' conference in September, hosted by the University of Birmingham, Emma Frew organised a session titled 'Public health decision making within UK local government'. The session comprised of presentations from: Emma, providing an update on work funded by her NIHR Fellowship; Professor David Hunter (Durham University); Dr Joanne Gray (University of Northumbria); and Dr Mark Petticrew (London School of Hygiene & Tropical Medicine). The session presented research from across England, aimed at gaining a deeper understanding of the architecture of decision making within local government; recognising the political and cultural contexts; identifying the information needs of decision makers; and understanding what the barriers and obstacles are to using decision support tools to aid prioritisation, investment and disinvestment within UK local government. Delegates engaged in lively discussion that nicely summed up shared issues with respect to the use of evidence and the importance of context.



Hugh McLeod also organised a session on 'Outcomes for commissioning: the potential for capability wellbeing measures to support decision-making'. In this session, Professor Jo Coast (University of Bristol) introduced the capability approach and the ICECAP measures (designed for assessing outcomes in the economic evaluation of interventions across the health and social care system). Ellen Rule (Director of Transformation, Gloucestershire CCG) outlined the capability measures' potential to support decisions about resource allocation, and how Gloucestershire is planning to take forward piloting the use of ICECAP measures, building on Hugh's work while on secondment to the CCG in 2015. Hugh, Jo and Ellen were joined in a panel discussion by Barbara Stevens (Clinical Programme Lay Champion, Gloucestershire CCG) and Dr Graham Mennie (GP and Clinical Programme Group Lead, Gloucestershire CCG). The discussion highlighted the need for holistic outcome measurement and the role that ICECAP measures could consequently fulfil.

Staff news: Congratulations to...



Ilias Goranitis on his promotion to Research Fellow.

Ilias specialises in the economic evaluation of health and social care interventions, and his methodological interests include the exploration of

broader evaluative spaces and the application of the capability approach in economic evaluations.

Ilias is currently funded to explore the cost-effectiveness of antibiotic prophylaxis in miscarriage surgery in a multinational MRC-funded trial taking place in Malawi, Uganda, Tanzania, and Pakistan (AIMS Trial).



Mark Monahan on his promotion to Research Fellow.

Since he joined HEU in November 2013, Mark has carried out decision analytic modelling to assess the cost-effectiveness of clinical decision rules in unprovoked venous thromboembolism, the diagnosis of heart failure (REFER study) and the diagnosis of hypertension (PROOF-BP study).

Mark has also undertaken non-clinical decision rule related research that includes assessing the cost-effectiveness of universal iodine supplementation for pregnant women and a feasibility study of pressure garment therapy versus no pressure garment therapy for burn patients (PEGASUS study).

Congratulations to all of our students who graduated in July 2016. Those lucky enough to graduate in person are captured in the photograph.

September saw us welcome our new intake. As well as three students who have been awarded NIHR studentships for the Health Economics and Econometrics MSc course, we have 25 new students on the MSc in Health Economics and Health Policy. We hope that they have a productive and enjoyable time with us.



Selected recent publications

- Canaway A, **Al-Janabi H**, **Kinghorn P**, Bailey C, Coast J. Development of a measure (ICECAP-Close Person Measure) through qualitative methods to capture the benefits of end-of-life care to those close to the dying for use in economic evaluation. *Palliative Med* 2016. In press
- **Goranitis I**, **Barton P**, Middleton L, Deeks J, Daniels J, Latthe P, Coomarasamy A, Rachaneni S, McCooty S, Verghese TS, **Roberts T**. Testing and Treating Women after Unsuccessful Conservative Treatments for Overactive Bladder or Mixed Urinary Incontinence: A Model-Based Economic Evaluation Based on the BUS Study. *PLoS ONE* 2016 11(8)
- **Goranitis I**, Coast J, Day E, Copello A, Freemantle N, Seddon J, Bennett C, **Frew E**. Measuring health and broader wellbeing benefits in the context of drug addiction: the psychometric performance of the ICECAP-A and EQ-5D-5L. *Value Health* 2016 19(6): 820-828
- Heazell A, Siassakos D, Blencowe N, Burden C, Bhutta Z, Cacciatore J, Dang N, Das J, Flenady V, Gold K, Mensah O, Millum J, Nuzum D, O'Donoghue K, Redshaw M, Rizvi A, **Roberts T**, et al. Ending preventable stillbirths 3: Stillbirths: economic and psychosocial consequences. *The Lancet* 2016 378(10018): 604-616
- Jordan R, Adab P, Sitch A, Enocson A, Blissett D, **Jowett S**, et al. Targeted case finding for COPD versus routine practice in primary care (TargetCOPD): a cluster randomised controlled trial. *Lancet Respir Med* 2016 4(9): 720-30
- **Oppong R**, et al., Cost effectiveness of amoxicillin for lower respiratory tract infections in primary care: an economic evaluation accounting for the cost of antimicrobial resistance. *Brit J Gen Pract* 2016. In press.
- **Penaloza C**, **Jowett S**, **Barton P**, et al. Cost-effectiveness analysis of different systolic blood pressure targets for people with a history of stroke or transient ischaemic attack: economic analysis of the PAST-BP (Prevention After Stroke – Blood Pressure) Study. *Eur J Prev Cardiol* 2016 23(15):1590-8
- Turton AJ, Cunningham P, van Wijck F, Smartt HJM, Rogers CA, Sackley CM, **Jowett S**, et al. Home-based reach-to-grasp training for people after stroke is feasible: a randomised controlled trial. *Clin Rehabil* 2016. In press.

Many student dissertations from our two MSc programmes result in a peer reviewed publication. A recent selection of successful publications, resulting from MSc dissertations can be found below:

Andronis L, Kinghorn P, **Qiao S**, Whitehurst D, Durrell S, McLeod H. Cost-Effectiveness of Non-Invasive and Non-Pharmacological Interventions for Low Back Pain: a Systematic Literature Review. *Applied Health Economics and Health Policy* 2016. In press

Duarte R, Lambe T, Raphael J, Eldabe S, Andronis L. Intrathecal drug delivery systems for the management of chronic non-cancer pain: protocol for a systematic review of economic evaluations. *BMJ Open* 2016. In press

Koufopoulou M, Sutton AJ, Breheny K, Diwakar L. Methods Used in Economic Evaluations of Tuberculin Skin Tests and Interferon Gamma Release Assays for the Screening of Latent Tuberculosis Infection: A Systematic Review. *Value in Health* 2016 19;2:267-276

Mantopoulos T, Mitchell P, Welton N, McManus R, Andronis L. Choice of statistical model for cost-effectiveness analysis and covariate adjustment: empirical application of prominent models and assessment of their results. *European Journal of Health Economics* 2016 17;8:927-938

Sharma V, Sundar SS, Breheny K, Monahan M, Sutton AJ. Methods Used in Economic Evaluations of Testing and Diagnosis for Ovarian Cancer: A Systematic Review. *Int J of Gynecological Cancer* 2016 26;5:865-872

Thorn J, Coast J, Andronis L. Interpretation of the expected value of perfect information and research recommendations: a systematic review. *Medical Decision Making* 2016 36;3:285-95

MSc Programmes and associated short courses

HEU runs two separate but allied MSc programmes: MSc Health Economics and Health Policy and MSc Health Economics and Econometrics. Both programmes explore the key principles and theories upon which health economics is based as well as developing practical skills for the conduct of empirical work.

- ◆ The MSc in **Health Economics and Health Policy** is particularly suited to people currently working in the health care sector who wish to improve their understanding of health economics; and graduates who wish to pursue a career in health economics.
- ◆ The MSc in **Health Economics and Econometrics** is offered in collaboration with the Department of Economics. The NIHR have awarded three studentships for talented students with a first degree in economics. The programme is differentiated primarily by its compulsory modules in Microeconomics and Econometrics.
- ◆ Selected modules are also accessible as **short courses**, see website for details.

For more information visit: www.birmingham.ac.uk/healthconomics or email healthconomics@contacts.bham.ac.uk