





# WINTER 2017/18

# Welcome to the Winter 2017/18 newsletter of the Centre for Health Economics and Medicines Evaluation

In this issue, we focus on recent achievements which include

- Collaborative studies with the University of Liverpool on sight loss prevention, funded by NIHR, and treatments for follicular lymphoma funded by Cancer Research UK (CRUK)
- Influencing national and international policies relating to treatments for rare diseases, safety of antiepileptic drugs, and disinvestment of ineffective (and low-value) medicines
- Recent webinars in Toronto and UK on economics of nature based prevention and green care—valuing nature in health economics

Further information on research, teaching and NHS support activities is available from our website: cheme.bangor.ac.uk or contact our administrator Ann Lawton: cheme@bangor.ac.uk

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Professor Rhiannon Tudor Edwards & Professor Dyfrig Hughes

# **INSIDE THIS ISSUE...**

Spotlight on research Upcoming events Staff news Recent events Recent publications



Public health economics and the natural environment webinar by Rhiannon Tudor Edwards http://cheme.bangor.ac.uk/webinars.php.en

## **Preventing sight loss**

Seow Tien Yeo and Rhiannon Tudor Edwards are coinvestigators on the NIHR-i4i funded optical coherence tomography (OCT) study (£1.3 million), led by Dr Yalin Zheng from the University of Liverpool's Department of Eye & Vision Science. The study aims to develop and explore the clinical development of an Ultra-Sensitive OCT (US-OCT) device to improve the management of eye disease, bring earlier detection and diagnosis, allow stratification and personalisation of clinical management, and improve monitoring of treatment outcomes for patients with corneal diseases (keratoconus and Fuchs endothelial corneal dystrophy).

## Follicular lymphoma

Follicular lymphoma (FL) is a slow growing cancer of the lymph glands. Dyfrig Hughes is co-investigator on the Cancer Research UK (CRUK) research project entitled: Phase 3 evaluation of PET-guided, Response-Adapted therapy in patients with previously untreated, high tumour burden follicular lymphoma (PETReA). Led by Professor Andrew Pettitt of the University of Liverpool, and with Colin Ridyard as the trial economist, this trial is expected to influence the future management of patients with FL by identifying and treating those most at risk from relapse.



## Preventing pain in bowel screening

Seow Tien Yeo and Rhiannon Tudor Edwards are coinvestigators on the NIHR-RfPB funded Water-Assisted Sigmoidoscopy (WAS) study (£347,027), led by Professor Matt Rutter from the University Hospital of North Tees. The study aims to investigate the effects of WAS on patientreported procedural pain, when compared with CO<sub>2</sub>assisted insertion, to improve patient experience during screening.

# Renewed infrastructure funding to the Welsh Health Economics Support Service (WHESS) and Welsh Health Economics Group (WHEG) meeting 2017

Collaboratively CHEME at Bangor University and Swansea Centre for Health Economics at Swansea University were successful in gaining a further £800,000 funding from Welsh Government through Health and Care Research Wales for the period 2018-2020. This funding, at an all Wales level, is for the provision of health economics support to health care research through the Research Design and Conduct Service, and some policy support to health boards. WHEG held a meeting in Bangor University and we were delighted to welcome Professor Steve Morris (UCL) and Dr Steve Watkins (Public Health for Stockport) as our outside speakers.

# EVENTS...

## **Forthcoming events**

Colin Angus from Health Economics Decision Science, the University of Sheffield will be our invited guest speaker for February as part of our seminar series.

CHEME will be hosting the British Pharmacological Society's Clinical Pharmacology Colloquium in May 2018. This will be the third occasion for this meeting to be held at Bangor.

The short courses in Pharmacoeconomcis and Public Health Economics will be held in March and April of 2018.

Registration is now open:

http://cheme.bangor.ac.uk/events/pharmacoeconomicsshort-course-34917

http://cheme.bangor.ac.uk/health-economics-course-16.php.en

## Fundraising

Emily Holmes hosted an Epilepsy Action Tea Break in CHEME on 23rd October and raised £46.26 towards coffee and chat support groups for people affected by Epilepsy.



# STAFF NEWS...

### **Congratulations Dr Emily Holmes**

Emily Holmes graduated on 18th July with a PhD in Health Economics. Her



focused on understanding medication adherence using health psychology and behavioural economic theories and was supervised by Professors Dyfrig Hughes & Val Morrison.

research

#### New appointment

Dr Victory Ezeofor holds a PhD in Mathematical Medicine and Biology from the University of Nottingham. He is also trained as a data scientist/analyst. His primary area of research is in mathematical/statistical modelling of complex networks, deterministic and discrete models. CHEME is delighted to welcome Victory as Mathematical and Statistical modeller joining the Public Health Economics Research Group.

The Centre for Health Economics & Medicines Evaluation is pleased to have Dr Abdullah Al-Bassam join us for a year as a visiting researcher from Kuwait University. His research will focus on medication adherence.

#### **MSc Module**

CHEME is pleased to welcome record numbers of students onto the Health Economics module of the Masters in Public Health and Health Promotion in the School of Healthcare Sciences at Bangor University.



## Congratulations to Carys Jones who has been awarded a Fellowship

In Wales there at 45,000 people living with dementia and the cost of illness has been estimated at £1.4 billion per year. The highest part of this cost is unpaid care by family and friends. Support services can be fragmented and difficult for people to access across health and social care sectors. Dr Carvs Jones has been awarded a Social Care Fellowship by Health and Care Research Wales to explore the value of third sector services for family carers of people with dementia. Over the next four years, the fellowship will identify what works for whom in the provision of these services, will highlight examples of best practice, and examine factors that make it easier for people to use and access services.



# Influencing policy on drug safety..

Emily Holmes and Dyfrig Hughes contributed evidence to the European Medicines Agency's first public hearing, on the safety of the antiepileptic drug valproate in women of childbearing potential.

#### ..and effectiveness

Dyfrig presented at a NICE / NHS England decommissioning summit on "A framework for the identification and appraisal of medicines for disinvestment".

# Webinar: Public health economics and the natural environment

Rhiannon Tudor Edwards and Adams Koshy (Eftec, Environmental Economics) jointly presented a webinar as part of the Ecosystems.net series: <u>A</u> <u>practical guide to measuring and</u> <u>valuing the natural environment as a</u> way of improving population health.

#### Warm homes for better health

Nathan Bray, Rhiannon Tudor Edwards and Eira Winrow published an article with The Conversation about the health and economic impacts of poor housing and fuel poverty.

https://theconversation.com/investing-inwarmer-housing-could-save-the-nhsbillions-82196

The research was also featured in Public Sector Focus.

http://flickread.com/edition/html/ index.php?pdf=59f1ee7a05b3e#36

#### **Orphan drugs**

Dyfrig Hughes presented on orphan drug incentives and pricing at the Royal Pharmaceutical Society winter summit meeting in London, and at the European Public Health Alliance forum on Universal Access & Affordable Medicines in Brussels. This programme of research, with PhD student Siobhan Bourke, has potential implications with the European Commission review of incentives in orphan drug development.

#### Adalimumab for JIA-uveitis

Giovanna Culeddu, Eifiona Wood, Catrin Plumpton and Dyfrig Hughes recently completed an economic evaluation of the SYCAMORE trial, which was published earlier this year in the NEJM. The findings are likely to inform NHS policy on the availability of adalimumab for the indication of uveitis associated with juvenile idiopathic arthritis.

Giovanna's PhD, which will include analyses of the SYMACORE trial, aims to explore Bayesian methods of costeffectiveness analysis.

## **Presentations**

PhD student Hannah Grey went to a Public Health PhD conference at Liverpool John Moores University and won best poster presentation. She has also been accepted to present a poster and attend a workshop at the Association of Children's Residential Centers 62nd Annual Conference in Boston.

Nathan Bray held a seminar on his fellowship research at the University of Birmingham Health Economics Unit. The title of the seminar presentation was: "Mobility and Quality of Life: Developing a preference-based outcome measure to assess the impact of mobility on quality of life".

Emily Holmes presented at the "Living with Epilepsy" Event hosted by Epilepsy Action Cymru.

Dan Hill-McManus presented on the Impact of non-adherence on the safety and efficacy of treatments for gout at the European Society for Patient Adherence, Compliance and Persistence (ESPACOMP) in Budapest; part of his PhD linking pharmacometric and pharmacoeconomic analyses.

#### Well done Colin Ridyard

Colin Ridyard won a top poster prize at ISPOR in Glasgow, where he presented 4 posters relating to the Subcutaneous Insulin: Pumps or Injections trial. Details of SCIPI can be found on: <u>http://</u> www.scipitrial.org.uk/index.html



# **Recent Publications**

Moniz-Cook E, Hart C, Woods B, Whitaker C, James I, Russell I, Edwards RT, Hilton A, Orrell M, Campion P, Stokes G, Jones RSP, Bird M, Poland F, Manthorpe J. Challenge Demcare: management of challenging behaviour in dementia at home and in care homes–development, evaluation and implementation of an online individualised intervention for care homes; and a cohort study of specialist community mental health care for families. NIHR Programme Grants for Applied Research 5(15). DOI: 10.3310/pgfar05150.

Williams NH, Roberts JL, Din NU, Charles JM, Totton N, Williams M, et al. Developing a multidisciplinary rehabilitation package following hip fracture and testing in a randomised feasibility study: Fracture in the Elderly Multidisciplinary Rehabilitation (FEMuR). Health Technology Assessment 2017; 21: 44 https://dx.doi.org/10.3310/ hta21440.

Hill-McManus D, Soto E, Marshall S, Lane S, Hughes D. Impact of non-adherence on the safety and efficacy of uric acidlowering therapies in the treatment of gout. Br J Clin Pharmacol. 2017 Sep 9. doi: 10.1111/bcp.13427.

Ridyard CH, Plumpton CO, Gilbert RE, Hughes DA. Cost-Effectiveness of Pediatric Central Venous Catheters in the UK: A Secondary Publication from the CATCH Clinical Trial. Front Pharmacol. 2017 Sep 19;8:644.

Hagemi A, Plumpton C, Hughes DA. Renal transplant patients' preference for the supply and delivery of immunosuppressants in Wales: a discrete choice experiment. BMC Nephrol. 2017 Oct 2;18(1):305.

Barker S, Lynch M, Hopkinson J. Decision making at the end of life for people with dementia by their informal carers: a rapid scoping review. Int J Palliat Nurs. 2017 Sep 2;23(9):446-456.

Powell GA, Bonnett LJ, Tudur-Smith C, Hughes DA, Williamson PR, Marson AG. Using routinely recorded data in the UK to assess outcomes in a randomised controlled trial: The Trials of Access. Trials. 2017 Aug 23;18(1):389. Kamaraj DC, Bray N, Rispin K, Kankipati P, Pearlman J, Borg J. A conceptual framework to assess effectiveness in wheelchair provision. Afr J Disabil. 2017 Sep 8;6:355.

Bray N, Noyes J, Harris N, Edwards RT. Measuring the health-related quality of life of children with impaired mobility: examining correlation and agreement between children and parent proxies. BMC Res Notes. 2017 Aug 10;10(1):377.

Bray N, Noyes J, Harris N, Edwards RT. Defining health-related quality of life for young wheelchair users: A qualitative health economics study. PLoS One. 2017 Jun 15;12(6):e0179269.

Bray N, Burns P, Jones A, Winrow E, Edwards RT. Costs and outcomes of improving population health through better social housing: a cohort study and economic analysis. Int J Public Health. 2017 Dec;62(9):1039-1050.

Morris C, Dunkley C, Gibbon FM, Currier J, Roberts D, Rogers M, Crudgington H, Bray L, Carter B, Hughes D, Tudur Smith C, et al. Core Health Outcomes In Childhood Epilepsy (CHOICE): protocol for the selection of a core outcome set. Trials. 2017 Nov 28;18(1):572.

Williams NH, Jenkins A, Goulden N, Hoare Z, Hughes DA, Wood E, Foster NE, Walsh DA, Carnes D, Sparkes V, Hay EM, Isaacs J, Konstantinou K, Morrissey D, Karppinen J, Genevay S, Wilkinson C. Subcutaneous Injection of Adalimumab Trial compared with Control (SCIATiC): a randomised controlled trial of adalimumab injection compared with placebo for patients receiving physiotherapy treatment for sciatica. Health Technol Assess. 2017 Oct;21(60):1-180.

Plumpton CO, Alfirevic A, Pirmohamed M, Hughes DA. Cost effectiveness analysis of HLA-B\*58:01 genotyping prior to initiation of allopurinol for gout. Rheumatology (Oxford). 2017 Oct 1;56(10):1729-1739.

Lynch M. Are we missing an opportunity in Nurse Education? Nursing and Healthcare International Journal. 2017;1(2):000112.



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