

# PRIFYSGOL BANGOR UNIVERSITY



## WINTER 2019/2020

### Welcome to the Winter 2019/20 newsletter of the Centre for Health Economics and Medicines Evaluation (CHEME)

In this issue, we focus on recent achievements which include:

- Publication of the BASICS clinical trial in the Lancet
- Analysis of the new Cancer Drugs Fund in England
- Building public health economics research links between Bangor University and the University of Liverpool
- Two day courses on "Building social value into economic evaluation and prioritisation in public health"

Further information on research, teaching (including short courses) and NHS support activities is available from our website: [cheme.bangor.ac.uk](http://cheme.bangor.ac.uk) or contact our administrator Ann Lawton: [cheme@bangor.ac.uk](mailto:cheme@bangor.ac.uk)

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**Professor Rhiannon Tudor Edwards & Professor Dyfrig Hughes**  
CHEME co-directors

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Professor Sabina De Geest presenting Dyfrig his honorary membership of ESPACOMP



## SPOTLIGHT ON RESEARCH...

We launched our Wellness in Work report, produced in conjunction with Public Health Wales. This report focuses on evidence of cost-effectiveness and return on investment across three areas: 1) economic benefits of developing a diverse and inclusive workforce, especially through greater participation of women, young people and those with disabilities; 2) ensuring the Welsh workforce is a healthy and happy one, and the value of early interventions, some of which may appear to be relatively modest (e.g., yoga), but have a significant return on investment in terms of reduced absenteeism; 3) the importance of strategies to get people back into work – not only for their personal health, but to boost the Welsh economy, especially in areas of skills shortage.



### Cancer Drugs

Eifiona Wood, with Dyfrig Hughes analysed the transparency of NICE appraisals of cancer drugs. They found that while NICE aims to ensure that its appraisal processes are as transparent as possible, the widespread use of 'commercial-in-confidence' pricing discounts agreed between NHS England and the manufacturer prevents scrutiny of the decision-making process by local commissioners [Pharmacoeconomics. 2019 Dec 12].

### New project on paramedics

Funded by BCUHB and WAST, a one-year study of the "Pacesetter Rotational Model" will evaluate the suitability and viability of a rotational model of Advanced Paramedic Practitioners in primary care. The rotational model is part of a shift of direction for paramedics to a role of autonomous decision makers, able to resolve a patient's needs during their contact rather than having an emergency response and transport function within a longer chain of patient care. The study will be led by Dr Alison Porter, PRIME Centre for Wales, with Dr Carys Jones from CHEME leading on the economic evaluation.

## RECENT EVENTS...

The Public Health Economics Group within CHEME had an away day to discuss goals and priorities for the coming year at the Snowdonia Lodge.



The World Peace Flame monument at Snowdonia Lodge aims to promote international peace through educational projects.

### Building the North Wales-North West research corridor

With shared interests in public health economics, we held a joint research symposium between CHEME and colleagues from the University of Liverpool Institute of Population Health Sciences in September. We were delighted to welcome Dr Brendan Collins, Professor Sally Sheard, and Professor Simon Capewell, along with early and mid-career researchers to Bangor with a plan for the next meeting in Liverpool, building the North Wales-North West research corridor. This complements existing links between Professor Dyfrig Hughes and the Liverpool Clinical Trials Centre, and the Department of Molecular and Clinical Pharmacology at the University of Liverpool.



### SROI & Social value workshop

Eira Winrow and Ned Hartfiel delivered social value training for the Wales Arts Health & Wellbeing Network at the Big Pit Museum near Abergavenny.

## Congratulations

Congratulations to Laura Timmis for successfully defending her PhD on the economics of follow-up of women with gynaecological cancer.

We welcome Laura as the Research Officer, working with Dr Emily Holmes, on a North West Cancer Research (NWCRC) funded project to elicit preferences for treatment for colorectal cancer.



Congratulations to Rhiannon Tudor Edwards for her Honorary Chair in the Institute for Population Health Sciences at the University of Liverpool; and for being awarded the 2019 Bangor Institute for Health and Medical Research (BIHMR) Early Career Researcher (ECR)-led research support award.



Congratulations to Dyfrig Hughes for being awarded honorary membership of ESPACOMP, the international society for medication adherence, at the annual conference in Porto, for his services to the society. He was the inaugural president of ESPACOMP when hosted at Bangor University in 2009. Dyfrig was also keynote speaker at an RCPE symposium on medication adherence in Manchester.

## Development and application of linked pharmacometric-pharmacoeconomic analyses in clinical drug development

Congratulations to Dan Hill-McManus who successfully defended his PhD thesis entitled "Development and application of linked pharmacometric-pharmacoeconomic analyses in clinical drug development". Dan was awarded an MRC Network of Hubs in Trial Methodological Research studentship, under the supervision of Dyfrig Hughes, to demonstrate novel applications of linked pharmacometric-pharmacoeconomic modelling.

Dan's thesis included a case study of urate-lowering therapies for the treatment of hyperuricemia in gout patients. A pharmacometric model was developed and applied to study the potential implications of non-adherence on drug safety [Br J Clin Pharmacol. 2018;84(1):142-152].

An economic model was subsequently developed, using the pharmacometric model outputs, to predict costs and QALYs, and assess the impact of imperfect medication adherence on treatment effectiveness and cost effectiveness [Value Health. 2018; 21 (12):1373-1381].

In his final chapter, Dan explored the use of pharmacometric clinical trial simulation to address key limitations of current value of information approaches to phase 3 clinical trial design.

Dan is now a research fellow at CHEME, researching the costs of biologics in ophthalmology and the direct acting oral anticoagulants. He is also working on the University of Liverpool led, NIHR HTA funded EINSTEIN project to establish the best step-up treatments for children with uncontrolled asthma despite Inhaled corticosteroids.

## ESRC Festival Welsh Health Economics Support Service (WHESS) workshop

The #ESRCFestival WHESS Event 2019 was held in November 2019, as the first public and patient involvement and engagement (PPIE) event run with the WHESS, on behalf of CHEME, funded by the Economic and Social Research Council UK Research and Innovation. The event was an opportunity to come together to celebrate health economics as part of social science research, giving local people a chance to discover, debate and discuss. This was part of a celebration including more than 470 events to show how social science research affects our lives - both now and in the future.

Below: Eifiona, Dyfrig, Catrin, Carys, Giovanna, Jo and Dan (l-r) enjoying a slice of cake to celebrate Dan's success





## PRESENTATIONS...

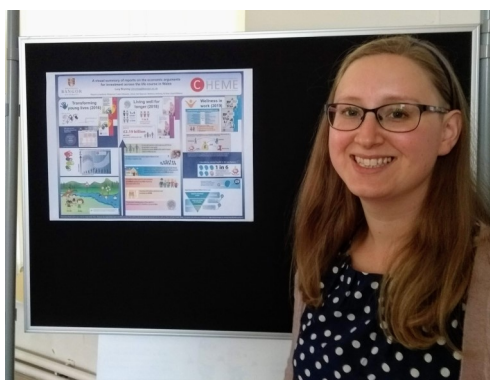
Dr Nathan Bray was an invited lecturer at the British Association of Dermatologists (BAD) conference in Liverpool. Nathan gave a lecture on the health economics of dermatology during the plenary session. He also presented findings from his fellowship research project at the International Health Economics Association (iHEA) conference in Basel, Switzerland.

Professor Rhiannon Tudor Edwards opened the Health and Care Research Wales conference talking about value and economics of health and social care on behalf of WHESS.

Dr Llinos Haf Spencer presented her poster on the linguistic validation of the PROMIS-10 health measure at the Health and Care Research Wales Conference, Cardiff.

Dr Emily Holmes gave an oral presentation in the prize paper session of the 22nd Annual Scientific Meeting of the Association of Upper GI Surgeons (AUGIS), held in Liverpool on A novel approach to benefit-risk assessment of surgical resection of colorectal liver metastases.

Catrin Plumpton presented a poster The impact of alternative assumptions on QALY calculations in the presence of missing data at the International Clinical Trials Methodology Conference in Brighton



Lucy Bryning presented a poster on a visual summary of reports on the economic arguments for investment across the life course at the Bangor Institute for Health and Medical Research Early and Continuing Researcher conference.

## PUBLICATIONS...

Wood EM, Hughes DA. The New and Non-Transparent Cancer Drugs Fund. *Pharmacoeconomics*. 2019 Dec 12.

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