



THE UNIVERSITY OF  
MELBOURNE

Centre for Health Policy,  
Melbourne School of Population and Global Health

# Health Economics Unit Newsletter

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## Professor Nancy Devlin's role in ISPOR



Professor Nancy Devlin is the 2019-2020 President of [ISPOR](#), the leading professional association for Health Economics and Outcomes Research (HEOR) with over 20,000 members worldwide. Nancy's initial thoughts on the President role can be found in the August issue of *Value and Outcomes Spotlight*,

available online [here](#). In her role as President, Nancy has presented at the US conference in New Orleans in May, chaired Board of Directors meetings and a two-day strategic planning exercise in July in San Diego, and in September visited the US offices of ISPOR in New Jersey for meetings with CEO Nancy Berg, Chief Scientist Richard Willke and other senior staff. In October Nancy will be participating in an Asia HTA Roundtable meeting, being held by ISPOR in Beijing in conjunction with 2<sup>nd</sup> Chinese national HTA conference. At the HTA Roundtable meeting, which will be attended by representatives from HTA organisations from across Asia, Nancy will be presenting on '**Lessons learned from harmonisation of HTA processes across Europe**'. Other ISPOR-related activities for the remainder 2019 include a series of meetings and presentations at the ISPOR Europe conference, to take place in Copenhagen in November.

## New Health Economics short course on offer

### Patient Reported Outcomes (PROs): measuring & valuing health

We are offering a new 2-day short course on **14<sup>th</sup> – 15<sup>th</sup> November, 2019**. The new course provides a comprehensive introduction to the collection and use of PRO data, with an emphasis on using PROs to assess value for money in health. Led by [Professor Nancy Devlin](#), the course covers the principles and practice of outcomes measurement, and how PROs can be preference-weighted to estimate HRQoL and QALYs to support economic evaluation. For more information and **course registration**, please click [here](#).

#### Course outline:

##### DAY 1: Measuring PROs

Introduction to PROs and PROMs | Introduction to the development and psychometric testing of PROs | Choosing which PRO to use | Good practise in collecting PRO data | Methods for analysing PRO data.

##### DAY 2: Valuing PRO data

Introduction to the use and properties of preference-weighted PROs | Eliciting preferences: Stated preference methods | Special considerations in eliciting and modelling stated preferences for PROs | Analysing utility-weighted PRO data | Going beyond HRQoL: new and emerging measurement approaches.

[More Info & Register here](#)

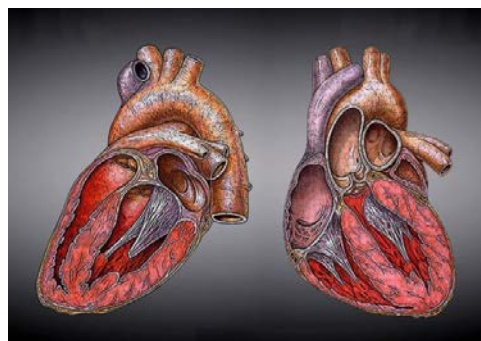
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## Featured News

### A cost-effectiveness model of genetic testing and periodical clinical screening for families with dilated cardiomyopathy

Max Catchpool, Dr Josh Knight and Dr Ilias Goranitis recently published a manuscript in the journal *Genetics in Medicine*. The article studies the relative cost-effectiveness of cascade genetic testing in asymptomatic relatives of patients with dilated cardiomyopathy (DCM). The study found that the addition of genetic testing to guide periodical clinical surveillance was very likely to be cost-effective and that testing should be offered to more patients with DCM than is currently recommended.

The study was a collaboration between the Health Economics Unit and Melbourne Genomics and made use of data collected as part of the Melbourne Genomics Health Alliance's DCM study.



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### It is cheaper and better, so let's treat more kids at home



A recent economic evaluation published in the prestigious *Lancet Infectious Diseases* co-authored by Dr Li Huang and A/Prof Kim Dalziel from the Health Economics Unit has shown that administering intravenous antibiotics at home is just as effective and safe as in a hospital, if not more so. And, it comes at almost half the cost.

One common reason why children are admitted to hospital is to be treated with intravenous antibiotics. This study comprised 188 children with moderate-to-severe cellulitis—a bacterial skin infection. Half were randomly assigned to be treated with intravenous antibiotics in

hospital, while the other half were treated at home with a medical staff attending to administer the intravenous antibiotics. Treatment failure was lower in the home group. Cost to hospital and families is also lower. Our findings should change the way clinicians consider care in Australia and internationally.

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### Cost-effectiveness of epileptic surgery compared with medical treatment in children with drug-resistant epilepsy

Max Catchpool and Associate Professor Kim Dalziel recently published their work examining the cost-effectiveness of epileptic surgery compared with medical treatment in children with drug-resistant epilepsy in *Epilepsy and Behavior*.

In collaboration with Dr Simon Harvey, a paediatric neurologist, a cost-effectiveness model was created

using individual patient-level costing and outcome data collected from the Royal Children's Hospital, Melbourne. The study found epilepsy surgery to be significantly more expensive than continued medical treatment, but it also resulted in a reduction in seizures and improvements in the health-related quality of life of patients.

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### HEU involvement with Australian Health Review.

Associate Professor Kim Dalziel has been appointed as an Associate Editor, and Professor Nancy Devlin has been appointed as a member of the Editorial Advisory Board, for the CSIRO journal, Australian Health Review. The *Australian Health Review* is an international, peer-reviewed journal that publishes contributions on all aspects of health policy, management and governance; healthcare delivery systems; workforce; health financing; and other matters of interest to those working in health care.

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## Spotlight on Mental Health: Children

MSPGH health economists, [Dr Jemimah Ride](#), [Associate Professor Kim Dalziel](#) and [Dr Li Huang](#), together with Associate Professor Nicole Black from Monash University and Rachel O'Loughlin from Murdoch Children's Research Institute, made a [submission](#) to the Royal Commission into Victoria's mental health system: **A health economics perspective on mental healthcare for children in Victoria**. The submission highlights that *childhood is an important opportunity for mental health intervention due to a high prevalence of mental health problems and the opportunity to change life outcomes, and investing in children's mental health pays off many times over*.

The submission places emphasis on four actionable suggestions:

1. *Fund programs with evidence of cost-effectiveness;*
2. *Make better use of routinely collected outcome measurement data in mental health services and develop a plan for state-level mental health data collection to accurately evaluate the impact of policies;*
3. *Build evidence on the socioeconomic inequalities in accessing children's mental health care services;*
4. *Strengthen the capacity of primary care to provide mental health care for children and explore further implementation of an integrated GP-Paediatrician model of care to manage children with mental health concerns;*
5. *Consider ways to reduce care fragmentation and to improve flow of information between parts of the system to assist coordination of care;*
6. *Promote the joint management of mental and physical health in children*



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## Launch of a new research program in childhood adversity and mental health

On May 27th 2019 former prime minister and Chair of Beyond Blue The Hon. Julia Gillard AC launched the new Centre of Research Excellence in Childhood Adversity and Mental Health. This will be a five-year collaboration led by Professor Harriet Hiscock at Murdoch Children's Research Institute in collaboration with our own [Associate Professor Kim Dalziel](#) and others at the University of Melbourne and around Australia.

The exciting program of research, co-funded for \$2.5 million by the National Health & Medical Research Council and Beyond Blue, will work to reduce the impact of adversity on young children in two high-needs areas of Victoria and NSW and identify and enhance support services for at-risk families. Associated Professor Dalziel and her team, including [Laura Fanning](#) and [Dr Jemimah Ride](#), will contribute a vital economics perspective to this important research, including examining the value for money of different approaches to reducing the mental health impact of childhood adversity.

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## Dame Kate Campbell Fellowship awarded to Associate Professor Kim Dalziel



[Associate Professor Kim Dalziel](#) has been awarded prestigious **Dame Kate Campbell Fellowship**, in recognition of research excellence within the Faculty of Medicine, Dentistry and Health Science (MDHS) at the University of Melbourne. Kim's research focuses on the application of health economics to health care for children.

"The Dame Kate Campbell Fellowship is a great honor and important validation of my work across the Melbourne University Clinical Networks. I will use the fellowship to continue to build capacity in child health economics and to further methods work in child health measurement. Dame Kate Campbell is a great inspiration in her pioneering work in the area of neonatal medicine and her achievements in the face of discrimination. I hope to make great use of this fellowship in her name and the opportunity afforded me."

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## Meetings and Presentations

### International meeting for health systems PROMs users, Brussels



Left to right: Nancy Devlin, Jeff Johnson, Fatima Al Sayah, Bas Janssen

Professor [Nancy Devlin](#) (HEU), and Professor [Jeff Johnson](#) (School of Public Health, University of Alberta), co-chaired a round-table meeting of leaders from health care systems in Brussels on September 17th 2019. The purpose of the meeting was to bring together patient reported outcomes (PRO) users from around the world to share experiences, challenges and emerging good practises in

using PROs as part of routine outcomes measurement and quality management in health care systems. The meeting brought together representatives from health care systems in Norway, Canada, New Zealand, Sweden, The Netherlands and England, each of whom presented on their use of PROMs data, in particular the EQ-5D, to inform commissioning, patient choice, quality management and policy. The OECD presented its work on using PROMs as a means of strengthening the international comparison of health system performance through patient-reported indicators. The meeting was funded by the EuroQol Research Foundation.

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### Dr Natalie Carvalho delivers Health Economics training for Fiji Ministry of Health and Medical Services

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[Dr Natalie Carvalho](#) held a Health Economics training workshop in Suva, Fiji for members of the Ministry of Health and Medical Services on August 13. Workshop sessions covered an overview of Health Economics and methods for conducting Economic Evaluation and Budget Impact Analysis in relation to new vaccine introductions. The workshop was funded by the Department of Foreign Affairs and Trade (DFAT) through the “Building Capacity Within MoHMS for the Evaluation of the Meningococcal C Conjugate Vaccine” project, in collaboration with the Murdoch Children’s Research Institute.

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### Health Economics Unit team at iHEA

The Health Economics Unit had a strong presence at the International Health Economics Association (iHEA) Congress held in Basel, Switzerland in July. We were well represented by members of our team delivering presentations across a range disease areas and health economic methodologies.

[Associate Prof Kim Dalziel](#) delivered a presentation on EQ-5D-Y health state preferences in Australia and Spain. [Dr Natalie Carvalho](#) delivered a presentation on the importance of framing effects when deriving health-related quality of life weights. [Dr Ilias Goranitis](#) presented his work on the value of incorporating experiences, information and decision weights in health economic discrete choice experiments under the auspices of the Australian Genomics. [Michelle Tew](#) presented her PhD work on identifying quality-of-life trajectories of total knee replacement using latent class analysis and discussed its potential for assessing sub-groups and heterogeneity in cost-effectiveness analysis. [Eunice Wu](#) presented the study on parental health spillover effect of rare genetic condition.

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### Dr Ilias Goranitis at the World Economic Forum offices

[Dr Ilias Goranitis](#) participated in the **Roundtable on the Economics of Rare Disease Data Federations** at the World Economic Forum’s Centre for the Fourth Industrial Revolution in San Francisco, CA. Ilias is a senior health economist working within HEU and [Australian Genomics](#). The World Economic Forum is publishing a white paper exploring the return-on-investment of enabling cross-border access to genomic data for the purposes of better-diagnosing and better-treating rare diseases. This white paper is an integral part of the Forum’s pilot project Breaking Barriers to Health Data, which aims to support producing a proof of concept for allowing cross-border access to genomic data.

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## Health Economics Unit team at AHES

The wide-ranging research of the HEU was showcased when several members of the team presented at the 41st annual Australian Health Economics Society conference in September in Melbourne. Laura Fanning presented a systematic review of economic evaluations of childhood food allergy interventions; Michelle Tew discussed the capture of patient heterogeneity within cost effectiveness analysis using the example of total knee replacement; Jemimah Ride presented a study of the effect of mental health treatment on quality of life for children with mental health problems; Ekaterina Woods presented on inequalities in healthcare utilisation and expenditure in children with asthma in the US; and Ilias Goranitis presented work on the uptake and value of genomic testing, with a focus on how to incorporate individual decision-making processes under risk. Prior to the conference, Natalie Carvalho shared her experiences of establishing collaborations and networks with early career health economists at the 6th Australian Health Economics Doctoral Workshop.

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## Staff News



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### Welcome new Research Fellow, Tianxin Pan

[Tianxin Pan](#) has recently joined the Health Economics Unit at the Centre for Health Policy as a Research Fellow. She is currently working with [Dr Ilias Goranitis](#) on economic evaluation on genomic sequencing testing among patients with complex neurological disease, and she will also be working with [Professor Nancy Devlin](#) on the measurement on patient reported outcomes and the cost-effectiveness thresholds, and [Associate Professor Kim Dalziel](#) on economic evaluation in clinical trials and economics of child health.

Tianxin is currently completing her PhD at the Nossal Institute for Global Health. Her PhD project investigates the economic impact of Non-communicable diseases (NCDs) on household welfare over time in China. Before commencing her PhD at the University of Melbourne, she had worked for WHO at Geneva and Ministry of Health in China.

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### Welcome new PhD student, Xiuqing Xiong

A warm welcome to our new PhD student, Xiuqing Xiong. Xiuqing's PhD study will be mainly focusing on health economics research in the child health area with the guidance of her principal supervisor, [Associate Professor Kim Dalziel](#) and co-supervisor, [Dr Natalie Carvalho](#). Xiuqing completed her degrees of Bachelor of Preventive Medicine, Bachelor of Economics and Master of Public Health in Peking University.

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## New funding

[Professor Nancy Devlin](#) (HEU) and Dr Brendan Mulhern (CHERE, UTS) have been awarded a grant from the EuroQol Research Foundation for the project "Exploring the relationship between EQ-5D-5L and PROMIS-29". Collaborators on this project include Dr An Duy Tran and Tianxin Pan (HEU) and Rosalie Viney (UTS).

[Dr Natalie Carvalho](#) (HEU) was part of a newly awarded NHMRC Centre of Research Excellence (CRE) being led by Professor Jodie McVernon (Doherty Institute and MSPGH Centre for Epidemiology and Biostatistics), along with Professor Barbara McPake (MSPGH Nossal Institute for Global Health). The CRE will focus on Supporting Participatory Evidence generation to Control Transmissible diseases in our Region Using Modelling (SPECTRUM).

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## ***Selected Publications***

Ibrahim, L. F., **Huang, L.**, Hopper, S. M., **Dalziel, K.**, Babl, F. E., & Bryant, P. A. (2019). Intravenous ceftriaxone at home versus intravenous flucloxacillin in hospital for children with cellulitis: a cost-effectiveness analysis. *The Lancet Infectious Diseases*, 19(10), 1101-1108.

**Catchpool, M.**, Ramchand, J., Martyn, M., Hare, D. L., James, P. A., Trainer, A. H., . . . , **Knight, J.**, & **Goranitis, I.** (2019). A cost-effectiveness model of genetic testing and periodical clinical screening for the evaluation of families with dilated cardiomyopathy. *GENETICS in MEDICINE*.

**Catchpool, M.**, **Dalziel, K.**, Mahardya, R. T. K., & Harvey, A. S. (2019). Cost-effectiveness of epileptic surgery compared with medical treatment in children with drug-resistant epilepsy. *Epilepsy & Behavior*, 97, 253-259.

Kent, S., Becker, F., Feenstra, T., **Tran-Duy, A.**, Schlackow, I., **Tew, M.**, . . . , **Palmer, A.**, **Clarke, P.** (2019). The Challenge of Transparency and Validation in Health Economic Decision Modelling: A View from Mount Hood. *PharmacoEconomics*.

Kaufman, J., **Knight, A. J.**, Bryant, P. A., Babl, F. E., & **Dalziel, K.** (2019). Liquid gold: the cost-effectiveness of urine sample collection methods for young precontinent children. *Archives of Disease in Childhood*, archdischild-2019-317561. doi:10.1136/archdischild-2019-317561

Manley, B. J., Arnolda, G. R., Wright, I. M., Owen, L. S., Foster, J. P., **Huang, L.**, ... & Marshall, I. R. (2019). Nasal high-flow therapy for newborn infants in special care nurseries. *New England Journal of Medicine*, 380(21), 2031-2040.

**DEVLIN N.**, Lorgelly P, Herdman M. Can We Really Compare and Aggregate PRO Data Between People and Settings? Implications for Multi-Country Clinical Trials and HTA. OHE Research Paper 2019. London: Office of Health Economics.

Hansen P, **DEVLIN N.** "Multi-Criteria Decision Analysis (MCDA) in health care decision making", In: *Oxford Research Encyclopedia of Economics and Finance*, Oxford University Press 2019.

**Goranitis, I.**, Lissauer, D. M., Coomarasamy, A., Wilson, A., Daniels, J., Middleton, L., ... & Mataya, R. (2019). Antibiotic prophylaxis in the surgical management of miscarriage in low-income countries: a cost-effectiveness analysis of the AIMS trial. *The Lancet Global Health*, 7(9), e1280-e1286.

**Ride, J.** (2019). Is socioeconomic inequality in postnatal depression an early-life root of disadvantage for children? *The European Journal of Health Economics*, 1-15.

## **Get in touch**



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