## HERUNEWS

HEALTH ECONOMICS RESEARCH UNIT

**April 2014** 

#### Welcome to HERU's April 2014 Newsletter.

In this edition we highlight key achievements over the past 4 months, as well as some current research activities across our themes.

I hope you enjoy reading our newsletter. Further information is available on our website and you can receive more frequent updates on the HERU Twitter page (http://twitter.com/HERU\_Abdn).

Professor Mandy Ryan Director, HERU

## Celebrating 40 Years of Health Economics at Aberdeen: A Tribute to Professor Gavin Mooney

With the tragic death of Professor Gavin Mooney in December 2012, HERU are to host an event to celebrate 40 years of Health Economics at Aberdeen University and pay tribute to Gavin's contribution to Health Economics at Aberdeen.

Gavin came to Aberdeen University in 1974 to work on a project bringing together Medicine and Economics. In 1977 he took up the Directorship of the newly formed Health Economics Research Unit. Gavin directed HERU between 1977 and 1986 and 1991 to 1993. His contributions to Health Economics, and HERU, were extensive.

This event, celebrating these contributions, will take place on 21st October 2014. Speakers include David Cohen, Cam Donaldson, Bob Elliott, Karen Gerard, Alastair Gray, Anne Ludbrook, Alan Maynard, Ali McGuire and Mandy Ryan.

For updates please watch our website. Further details will feature in our next Newsletter.

## HERU Poster wins prize at ICECAP Users' Group Workshop

The ICECAP-O (ICEpop CAPability measure for older people) is a measure of capability in older people for use in economic evaluation.

We extend our congratulations to Aileen Neilson and Paul McNamee of HERU, and Hanne Bruhn and Christine Bond (also from Aberdeen University), who won the 'Best Poster' prize at the 3rd ICECAP Users' Group Workshop, recently held at Birmingham University.







## **HERU Staff Celebrate Long Service Awards**

### **Celebrating 40 Years**



Professor **Bob Elliott** celebrated 40 years of service to the University of Aberdeen. Bob started work as a Research Fellow in the Department of Political Economy and has dedicated his career to economics at Aberdeen.

He is Professor of Economics and

between 2002 and 2012 was Director of HERU. His commitment to directing HERU contributed to HERU being recognised as one of Europe's leading health economics units. Bob is acknowledged internationally for his contributions to health and labour economics. He is a Fellow of the Royal Society of Edinburgh and an Independent Commissioner at the Low Pay Commission. Outside work Bob has a passion for opera, fine wine and Scottish mountains.

### **Celebrating 25 Years**



Professor Mandy Ryan celebrated 25 years of service to the University of Aberdeen. Mandy joined HERU in 1987 as a Research Assistant. In 1997 Mandy was awarded a 5-year MRC Senior Fellowship to develop and

apply discrete choice experiments (DCE) in health care. Mandy is recognised internationally for developing DCEs in health economics.

In 2002 she was awarded a Personal Chair in Health Economics by the University of Aberdeen and in 2006 she was elected as a Fellow of the Royal Society of Edinburgh. Mandy took up the Directorship of HERU in April 2013. Outside work Mandy enjoys trail running, mountain and road biking and hill walking.



# **Avoidable Scottish Hospitalisations (ASH)**

HERU Investigators: Marjon van der Pol, Dami Olajide, Maria Konstantinidou, Bob Elliott



**Collaborators:** Mark Dusheiko (University of York), Bruce Guthrie (University of Dundee), Louisa Jorm (University of Western Sydney), Alastair Leyland (MRC/CSO Social and Public Health Sciences Unit).

Potentially Preventable Hospitalisations (PPH) (also termed hospitalisations for 'ambulatory care sensitive conditions') are those that could potentially be prevented by timely and effective disease management within primary care. The concept of PPHs was originally developed in the USA but has been adopted widely by international health systems as an indicator of the quality of primary care. PPHs are also increasingly used within Scotland as NHS performance indicators. However, key questions remain about the validity of these measures. The aim of the project is to test the robustness of PPHs as indicators of the quality of primary care in Scotland and where appropriate to propose methods for refining PPH measures so that they might be better used to set targets for and monitor health system performance. We will explore relationships between quality and access of primary care services, hospital admissions for PPH diagnoses, and factors that confound and mediate these relationships. The findings will inform the use of PPH as a health system performance measure in Scotland and internationally. The research will identify refinements to the PPH indicator to improve its utility as a performance measure.

This project is conducted in conjunction with research in Australia led by Professor Jorm from the University of Western Sydney and funded by the National Health and Medical Research Council, Australia. The ASH project is funded by the Scottish Government, Chief Scientist Office. It started in September 2013 and the final report is due in August 2015. For further information contact Marjon van der Pol m.vanderpol@abdn.ac.uk

# The DEterminants of Dlet and Physical ACtivity (DEDIPAC) knowledge hub



HERU Investigators: Anne Ludbrook, Lynda McKenzie, Patricia Norwood

**Collaborators:** B De Roos, F Douglas, G McNeill and J Allen (Rowett Institute of Nutrition and Health, University of Aberdeen), and including a European Trans-disciplinary Research Network of Collaborators.



The Determinants of Diet and Physical Activity (DEDIPAC) Knowledge Hub (KH) is the first action of the European Joint Programming Initiative (JPI) 'A Healthy Diet for a Healthy Life'. Joint programming is a process by which European Member States engage in defining, developing and implementing a common strategic research agenda, based on a shared vision of how to address major societal

challenges. The overall objective of DEDIPAC is to contribute to improving the understanding of determinants of dietary, physical activity and sedentary behaviours. DEDIPAC KH is a multi-disciplinary consortium of scientists from 46 research centres supported by joint programming grants from 12 countries across Europe.

HERU is collaborating with researchers from the Rowett Institute of Nutrition and Health (RINH) to contribute to activities relating to "Evaluation and benchmarking of public health and policy interventions aimed at improving dietary, physical activity and sedentary behaviours" which is one of three thematic areas. A draft concept toolbox will be developed for application to policy interventions and multilevel or multicomponent interventions. We are currently engaged in a rapid review of methods for policy evaluation in the area of diet. Later in the year we will be working on the development of economic evaluation models.

Funding for this project is received by the Medical Research Council (MRC), The Chief Scientist Office (CSO) of the Scottish Government Health & Social Care Directorates and the University of Aberdeen.

For further information contact a.ludbrook@abdn.ac.uk

# Understanding push-pull factors in medical careers decision making



HERU Investigators: Diane Skåtun, Verity Watson, Nicolas Krucien

Collaborators: Jennifer Cleland (Division of Medical and Dental Education, University of Aberdeen), Charlotte Rees (Medical Education, University of Dundee), Karen Mattick, (University of Exeter), Peter Johnston (NHS Education for Scotland North Deanery, Aberdeen).

Medical education and training systems allow considerable individual choice by doctors, first, when they select a medical specialty, and second, regarding where they wish to practise within the health system. This is desirable for the doctor in training but not necessarily the service: under recruitment and/or attrition before completion of training are serious issues for some specialties and some locations. This project considered the most important "push-pull" career decision making factors for the current generation of UK medical students and trainees given their specialty choice. What drives medical students and trainees away from a place? What draws them to a new location? To what extent are specific factors important at different transitions?

The project surveyed medical trainees at all stages in their post graduate training from all deaneries in Scotland and also two in the North of England. Table 1 reports that while 76% of respondents are happy to remain in their current deanery at their next career decision-making point, there remains a substantive percentage that indicate they would like to relocate from their current deanery.

Location N (%) Remain in current Deanery 960 76.1 Relocate to another Deanery within Scotland 6.7 Relocate to another Deanery within England 20 1.6 Relocate to England 53 4.2 Relocate to Scotland 54 4.3 Relocate to Wales/N.I. 12 1.0 Relocate elsewhere in E.U. 1.0 13 Relocate out with E.U. 5.2

Table 1 Intentions to remain or relocate

The project employed a discrete choice experiment (DCE) to analyse the relative importance of six factors identified as important to medical careers decision making in the first two stages of the project: familiarity with the hospital/unit, geographical location, opportunities for spouse/partner, potential earnings, clinical/academic reputation and working conditions. Subgroup analysis was also conducted and found that different constituent groups of the medical trainee body placed different valuations on the factors that drove medical career decision making. Many of the factors driving career decision making are personal and hence not easily amenable to modifications. However, we identified that trainees value quality of training and learning environments and good working conditions which suggests that addressing issues to do with quality of working and training experience may increase the attractiveness of particular locations to tomorrow's doctors. Further analysis will be undertaken to value the strength of preference for the attributes included within the DCE.

This work fits well with the recent Shape of Training review, which recommends that units which cannot assure the quality of training/learning will have their training status removed (http://www.shapeoftraining.co.uk/). It seems that both policy architects and trainees place importance on at least some of the same factors, albeit from different positions.

This work was funded by NHS Education for Scotland (NES), who have already undertaken change on the basis of this work, and was undertaken in collaboration with Division of Medical and Dental Education (DMDE) and led by Professor Jen Cleland.

For further information please contact d.skatun@abdn.ac.uk

## **New Staff...**

We welcomed a new Research Assistant Ourega-Zoé Ejebu. Zoé holds an honours degree in Economics from the University of Aberdeen and an MSc in Financial Economics from the University of Glasgow. Her PhD thesis, 'Adverse selection in the credit market for consumers: Does comparison income influence UK individuals' demand for debt?', was successfully defended with minor corrections in March 2014. Zoé is working on research related to alcohol purchasing behaviour and minimum unit pricing (MUP) within the Health Behaviours and Inequalities theme. Her research is looking at the distributional impact of MUP by income and purchasing level, comparing results from scanner data with the Living Costs and Food Survey.



### **Selection of Conference Presentations.....**

**Heidenreich**, S. 'Assessing the validity of responses to discrete choice experiments: a behavioural framework for attribute non-attendance', Scottish Graduate Programme in Economics (SGPE) Residential Methodology Conference, Crieff, January 2014.

Ryan, M. 'Valuing the patient experience: going beyond QALYs (from vision to research to changing practice)', plenary presentation, Scottish Primary Care Conference, Carnoustie, January 2014.

Watson, V. 'Survey responses: the UK mode comparison study', Haindorf Seminar, Hejnice, Czech Republic, February 2014.

In January staff and students from HERU presented at the Health Economists Study Group meeting at the University of Leeds

- Mc Morrow, L., Ludbrook, A., Macdiarmid, J.I. and Olajide, D. 'Attitudes towards healthy eating, fruit and vegetable consumption, and health outcomes in Scotland'.
- McNamee, P. and Mendolia, S. 'The effect of chronic pain on life satisfaction: evidence from Australia'.
- Quayyum, Z. and McNamee, P. 'Inequality in utilization and incidence of benefits of free personal care in Scotland'.
- Watson, V., De Bekker-Grob, E.W. and Becker, F. 'Discrete choice experiment response rates: a metaanalysis'.
- Krucien, N., Watson, V. and Ryan, M. 'Multi-attribute valuation: a comparison of the discrete choice experiment and best-worse scaling approaches'.

## Selection of Research Support Awarded.....

A Ludbrook along with colleagues at the Rowett Institute of Nutrition and Health (RINH) and the Aberdeen University. *DEterminants of Dlet and Physical Activity Choice (DEDIPAC)*. Medical Research Council (MRC) £26,290, duration 3-years.

M Ryan and N Krucien with colleagues in the Centre for Academic Primary Care at the University of Aberdeen. A discrete choice experiment to value the personalisation of support for self-management of chronic pain. The Health Foundation, £159,812, duration 16 months.

**G Scotland**, F Denison (University of Edinburgh). (Got-it-trial) A pragmatic adaptive sequential placebo controlled randomised trial to determine the effectiveness of Glycerine triturate for retained placenta. National Institute for Health Research (NIHR), £1,679,448, duration 42 months.

### Selection of Publications.....

Anderson, A.S., Craigie, A.M., Caswell, S., Treweek, S., Stead, M., Macleod, M., Daly, F., Belch, J., Rodger, J., Kirk, A., Ludbrook, A., Rauchhaus, P., Norwood, P., Thompson, J., Wardle, J. and Steele, R.J.C. (2014) 'The impact of a bodyweight and physical activity intervention (BeWEL) initiated through a national colorectal cancer screening programme: randomised controlled trial', *BMJ*, 348, g1823.

Bryan, S., Mitton, C. and Donaldson, C. (2014) 'Breaking the addiction to technology adoption' (editorial), *Health Economics*, 23(4), 379-383.

**Eberth, B., Olajide, D.,** Craig, P. and Ludbrook, A. (2014) 'Smoking-related disease risk, area deprivation and health behaviours', *Journal of Public Health*, 36(1), 72-80.

Pol, M. van der, Currie, G., Kromm, S. and Ryan, M. (2014) 'Specification of the utility function in discrete choice experiments', *Value in Health*, 17(2), 297-301.

Ryan, M., Kinghorn, P., Entwistle, V.A. and Francis, J.J. (2014) 'Valuing patients' experiences of healthcare processes: towards broader applications of existing methods', *Social Science & Medicine*, 106, 194-203.

Luchini, S. and Watson, V. (2014) 'Are choice experiments reliable? Evidence from the lab', *Economics Letters*, 124(1), 9-13.



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