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NEW online MSc/ Postgraduate Diploma/ **Postgraduate Certificate** in Health Economics for **Health Professionals**

In October 2017 we are launching our new online postgraduate programme in Health Economics for Health Professionals. This programme builds on almost 40 years of experience providing the Post Graduate Certificate in Health Economics and offers students a new opportunity to extend their studies to Diploma and MSc level.

As with the PG Certificate in Health Economics, the new programme is aimed at health professionals, and other interested students, who would like to improve their understanding of health economics and research methods and who are unable to study full-time and/or want to avoid relocating. No experience of economics is necessary.

The programme will help students understand how health economics can contribute to decisions on the allocation of scarce resources, the techniques available for use within an economic evaluation and how health economics can contribute to broader debates on the provision and financing of healthcare.

Further details are available at: https://www.abdn.ac.uk/study/ postgraduate-taught/degree-programmes/111/health-economics/

Successful DCE Workshop in Canada



Delegates at the DCE Workshop in Banff, Canada

In February 2017, we held in collaboration with the University of Calgary our popular DCE

Banff, Canada. 18 delegates from a range of countries (Canada; America; Finland; Australia; Norway; and Israel) attended, and provided lively debate and discussion about the application of DCEs in health economics. Our next joint Aberdeen-Calgary DCE workshop will take place in Banff in 2019, date to be confirmed.

Announcement: **Next Expert Workshop**

Our next Discrete Choice Experiment Workshop: Using Discrete Choice Experiments in health economics: theoretical and practical issues workshop will take place 15-17 November in Aberdeen.

For further details see:

https://www.abdn.ac.uk/heru/courses/workshops/annual-dceworkshop/



MUNROS: Health Care Reform: the impact on practice, outcomes and costs of New roles for health professionals



The MUNROS research project, with nine partners and funded by the European Union held a very successful end of project conference at the Royal College of Surgeons in Edinburgh on 6 February 2017.

The MUNROS project examined health care reform: the iMpact on practice, oUtcomes and costs of New roles for health pROfeSsionals. Around 70 delegates from across the European Union met to discuss presentations of the results of the research undertaken in MUNROS.

Stand alone and round table presentations were followed by extended discussion in breakout groups where the focus was on how to maximise the policy contribution and impact of

Keynote presentations were given by Mark Pearson, Deputy Director of Employment,

Labour and Social Affairs at the Organisation for Economic Co-operation and Development (OECD), Caroline Hager, Directorate for Health and Food Safety at the European Commission and Frank Strang, Deputy Director of the Scottish Government FU Hub.

See www.abdn.ac.uk/munros for more information on this project.





NEWLY Funded Research...

Reducing Asthma Attacks in Children - a UK Collaborative Randomised Trial (RAACENO)

What the project is about

The RAACENO trial is concerned with childhood asthma exacerbations, which are common, potentially life-threatening and a considerable financial burden to healthcare systems. A recent meta-analysis (Turner, 2015) suggests that Fractional Exhaled Nitric Oxide (FENO) guided treatment could reduce asthma exacerbation in children.

How health economics enhances the research

The intervention has the potential to result in both an improvement in Health-Related Quality of Life for children and cost savings for the NHS. An integral part of informed evidence-based decision-making is to consider not only whether the intervention is clinically effective for the individual patient, but also whether adopting the intervention across the NHS would be an efficient use of resources. Therefore, a within-trial based economic evaluation will be undertaken to estimate the costs and benefits (QALYs) of the alternative treatments and relative cost-effectiveness of the intervention compared

to routine care over 12 months (the duration of the trial).

If results for the FENO intervention are positive then this could be adopted as part of asthma management in children when used in UK routine clinical practice.

Reference

Tuner, S. (2015) Exhaled nitric oxide and the management of childhood asthma--yet another promising biomarker "has been" or a misunderstood gem, Paediatric Respiratory Reviews, 16(2), 88-96.

Research Team: S Turner, H Morgan (HSRU, University of Aberdeen); S Fielding, D Price (Applied Health Sciences, University of Aberdeen); M Thomas (University of Southampton) and E Gaillard (University of Leicester) and A Neilson (HERU).

For further information please contact **Aileen Neilson:** *aileen.neilson@abdn.ac.uk*



Surgery versus wait and see: The C-Gall Trial

Gallstones are common, especially in women, but in many people these go unnoticed. About one in three people with gallstones develop symptoms. These usually include a severe pain in the upper right-hand side of the abdomen (known as 'biliary colic'), and sometimes nausea and vomiting. At times the pain is accompanied by inflammation of the gallbladder (cholecystitis). Once gallstones start giving symptoms, painkillers, anti-inflammatory medicines and antibiotics are usually prescribed initially and surgery is advised to medically fit patients.

Surgery to remove the gallbladder (cholecystectomy) is the most common way to treat biliary pain or cholecystitis due to gallstones. Approximately 70,000 cholecystectomies are performed every year in the UK, with significant costs for the NHS. Surgery is commonly offered to people who present at secondary care with pain or cholecystitis due to gallstones. However, it is known that some patients do not have any more symptoms after the initial episode of pain and that surgery may not be necessary. A policy of 'conservative management' (painkillers/

antibiotics and lifestyle advice) could, therefore, be appropriate in this group.

The C-GALL trial will identify and randomly allocate 430 patients from 20 UK hospitals to either receive a surgical procedure to remove the gallbladder or to receive conservative management. Apart from treatment allocation and measurement of study outcomes, participants will have standard NHS follow-up.

The main outcome of the study will be the difference between the two policies in the patients' quality of life across an 18 month period from enrolment. In addition, the trial will inform whether gall bladder removal is worthwhile to the NHS in terms of balancing any benefit to people's health against the added costs (cost-effectiveness).

The results of this trial will enable patients, clinicians and policy-makers to decide the worth of conservative management as part of the treatment of uncomplicated gallstone disease.

Research Team: I Ahmed (NHS Grampian); C Ramsay, J Norrie, K Gillies, A Avenell, M Brazzelli (HSRU, University of Aberdeen) and P Murchie (Other Applied Health Sciences, University of Aberdeen) and Rodolfo Hernández (HERU).

For further information please contact Rodolfo Hernandez: r.a.hernandez@abdn.ac.uk

Completed Research...

Mesh or no mesh in treatment of pelvic organ prolapse?

The costs of treating women with pelvic organ prolapse are substantial. Surgeons and researchers have suggested that mesh or graft reinforcement of the repair might provide a better chance of cure and prevent the need for further surgery. This is important because if the failure rate is reduced, women will be exposed to less risk, could experience improved quality of life, and the costs may be less to the NHS. However, there is growing concern about the use of transvaginal mesh and biological graft material in prolapse surgery, particularly with regard to safety and efficacy.

We conducted an economic evaluation alongside the UK National Institute for Health Research (NIHR) funded PROSPECT study (PROlapse Surgery: Pragmatic Evaluation and randomised Controlled Trials; Glazener et al). For women having a primary prolapse operation we compared (1) synthetic non-absorbable mesh inlay and (2) biological graft with a standard repair from an NHS perspective.

Mean differences (MDs) in costs and Quality Adjusted Life Years (QALYs) (based on the EQ-5D-3L) were presented at 1 and 2 years. Results were extrapolated to 5 years using a probabilistic Markov decision-analytic model. Cost-effectiveness results were expressed as incremental costs per QALY gained, and the net monetary benefit approach was used to identify the optimal treatment modality, based on a ceiling willingness to pay of £30,000 per QALY gained.

Both synthetic mesh and biological graft repairs were more costly to perform, driven by the cost of the mesh material. There was no evidence of differences in follow-up use of health services at 2 years. Based on the 5 year model, there is no evidence that either mesh strategy would be a cost-effective use of NHS resources. Standard repair was, on average, the most cost-effective because of lower intervention costs, lower costs of treating mesh-related complications and similar rates of surgical failure at 2 years. Unless there is a significant decrease in reoperation rates for failure in the medium or long term, it is unlikely that any type of mesh or graft would be cost-effective, given the excess cost over standard

repair and the excess cost of treatments for mesh complications. However, further long-term follow-up is required to validate the extrapolation models used.

Research Team: Charis Glazener, Suzanne Breeman, Alison McDonald, Gladys McPherson, Graeme MacLennan and John Norrie (HSRU), Christine Hemming and Kevin Cooper (Aberdeen Royal Infirmary), Robert Freeman (Derriford Hospital, Plymouth), Anthony Smith (St Mary's Hospital, Manchester), Suzanne Hagen and Andrew Elders (Glasgow Caledonian University), Isobel Montgomery (Patient representative, Aberdeen), Mary Kilonzo and Dwayne Boyers (HERU).

For more information on this study contact Mary Kilonzo m.kilonzo@abdn.ac.uk or Dwayne Boyers d.boyers@abdn.ac.uk



New Aberdeen - Curtin Studentship...

In January we warmly welcomed Ni Gao, a new PhD student. Ni is pursuing a PhD on the topic "Thriving not surviving: improving follow-up care for breast cancer survivors", under the supervision of Professor Mandy Ryan and Dr Nicolas Krucien from HERU, and Dr Richard Norman and Dr Suzanne Robinson from Curtin University, Western Australia.

The PhD is part of the Aberdeen Curtin Alliance, combining the strengths of two of the world's leading Universities (http://aberdeencurtinalliance.org/).

Public Engagement Activities...

HERU Research Fellow Dr Zoé Ejebu volunteers as a STEM Ambassador at Aberdeen University. The STEM Ambassadors scheme inspires young people to pursue Science, Technology, Engineering and Mathematics subjects as career and study options. As part of her duties as a STEM Ambassador Zoé has recently given two talks to schoolchildren on her work as a health economics researcher.

- **Ejebu, O.-Z.** (2017) 'Career talk', *World of Work Week* (Public Engagement), Findochty Primary School, Findochty, 8 February 2017.
- Ejebu, O.-Z. (2017) 'Career talk', Now That's What I Call Career Advice! 17 (Public Engagement), Bucksburn Academy, Aberdeen, 21 February 2017.

For more information on our Public Engagement activities see: http://www.abdn.ac.uk/heru/engagement/



We welcomed Jonathan Sicsic in January 2017 as a visiting post-doctoral researcher for six months.

Jonathan is working with **Verity Watson** and **Nicolas Krucien** on Discrete Choice Experiment related research. Jonathan is based at the University of Paris 11 and his period in HERU is funded through the Marie Curie EU Scheme.

Selection of Presentations...

Watson, V. 'How to improve response consistency in discrete choice experiments? An induced values investigation', *Stated Preference Methods in Health Economics, Institute for Economic Analysis of Decision-making (Inst EAD)*, Department of Economics, University of Sheffield, 12 January 2017.

Ryan, M. 'Valuation in health economics: going beyond Quality Adjusted Life Years (QALYs)', Department of Community Health Sciences (CHS)/O'Brien Institute for Public Health Seminar Series, University of Calgary, Calgary, Canada, 3 February 2017.

Pol, M. van der 'Optimising the design of a financial incentive scheme for weight loss using behavioural economics', *Health Economists' Study Group (HESG) Winter Conference*, University of Birmingham, Birmingham, 4-6 February 2017.

Thomas, U., Pol, M. van der and Allan, J. 'Demand for physical activity and commitment contracts: the role of time preference, present bias and sophistication', *Health Economists' Study Group (HESG) Winter Conference*, University of Birmingham, Birmingham, 4-6 February 2017.

New funding...

Dr S. Turner (HSRU), University of Aberdeen and colleagues including **Aileen Neilson** secured funding from the National Institute for Health Research (NIHR) for project entitled 'Reducing Asthma Attacks in Children using Exhaled Nitric Oxide as a biomarker to inform treatment strategy – a randomised trial (RAACENO)'. The project was awarded £1,531,931 and will run for 48 months.

P. McNamee, A. Ludbrook, A. Neilson and P. Norwood (HERU) and A. Avenell (HSRU) were recently awarded funding from the Food Standards Agency to undertake a review of the costs of overweight, obesity and diet related illness in Scotland, and critical appraisal of the cost-effectiveness evidence base for interventions to reduce overweight, obesity and diet related illness. This project was awarded £49,985 and will run for six months.