

APRIL 2020

# HERU NEWS

HEALTH ECONOMICS RESEARCH UNIT

## Welcome to our April 2020 Newsletter

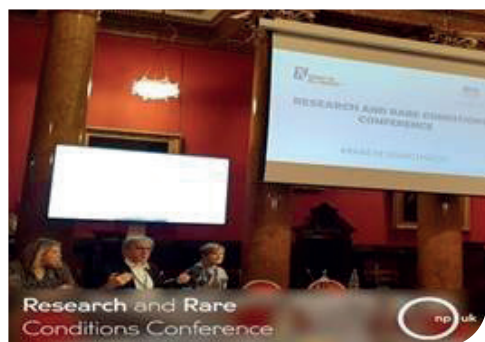
In this Newsletter we would first like to wish you all good health in these unprecedented times. To our NHS colleagues, and all essential workers, we would like to thank you for all that you are doing.

Like all universities we are in lockdown. As we adjust to working from home, with its individual challenges and opportunities, we have been reflecting on the relevance of our research to the COVID-19 pandemic. In the Newsletter we highlight some of our recent research that we hope can inform policy as we move forward. We also present a reflection on workforce planning post COVID-19.

We have dates for our 'Using Discrete Choice Experiments in Health Economics' course in Canada, and rescheduled dates for Aberdeen, and we highlight our online course provision in health economics. There are reports from recent events, updates on staffing and the latest HERU Blog posts, and news of research funding.

We hope you enjoy reading about our work and activities. Further information is available on our website. More frequent updates are on the HERU Twitter account (@HERU\_Abdn).

## Patient involvement in research...



Coinciding with Developmental Disabilities Awareness Month, Genetic Alliance UK's Research and Rare Conditions Conference was hosted by the Royal College of Physicians of Edinburgh. The conference was attended by clinicians, geneticists, health economists, patients and families. This broad range of people represents the many different issues faced by both service providers and users in genetics. **Michael Abbott**, of HERU, presented a short 'Soapbox Session' at the conference, titled 'What can health economics do for genetics?' The presentation highlighted our research that is trying



to capture the aspects of benefit that are most important to patients. The aim is to ensure that funding decisions provide the highest possible benefit to patients, at the lowest possible cost to the NHS.



Genetic Alliance UK also hosted an online patient update, using Zoom video conferencing. This meeting connected researchers with patients to answer any questions the patients might have about their genetic tests. Michael discussed the valuation work that's taking place in HERU and met with patients who will be invaluable to our future research valuing whole genomic sequencing.

## Our forthcoming courses...

We offer ONLINE courses.

Our online short course on 'Health Economics' lasts for 11 weeks and the next start date is January 2021. More details of the course are available at <https://www.abdn.ac.uk/heru/courses/cpd/>.

Our online postgraduate 'Health Economics for Health Professionals' course can be studied to MSc, Diploma or Postgraduate Certificate level and starts in September 2020 – <https://on.abdn.ac.uk/degrees/health-economics-for-health-professionals/>.

Due to COVID-19 we have cancelled our November 2020 'Using Discrete Choice Experiments in Health Economics' course. The next course, run in collaboration with the University of Calgary, will be in Banff, Canada in March 7th-10th 2021.

The course will run again in Aberdeen in 2021, from 29th September to 1st October. More details on both courses are available from <https://www.abdn.ac.uk/heru/courses/workshops/>.



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## What's good for me or what's good for us? COVID-19 and the valuation of community preferences

The COVID-19 pandemic raises pressing questions about the way we think about the public health preferences of citizens. As the effectiveness of responses to mitigate the spread of the virus depends on the cooperation of every community member, citizens' preferences towards communal goods and collective action should become an area of focus for health preference research. However, depending on how we ask the question, we might get different answers. Imagine we wanted to find out what kind of lockdown

measures young people would find acceptable. If we asked them to only consider the risk to themselves, many of them might be comfortable with the risk associated with lighter lockdown measures in exchange for greater freedoms. However, the answers might be very different if we ask them to also take the risk to their grandparents or to other vulnerable people in their community into account.

My PhD, which I successfully defended in late 2019, addressed such issues. The thesis focused on the range of ethical concerns that different economic preference valuation methods are sensitive to and explored ways to expand their scope to include 'other-regarding' and communal preferences. It was shown that whilst many of the valuation methods in the health economists' toolbox were capable of taking a community perspective, currently such methods focused on individual values. The PhD also demonstrated the value of deliberative approaches that bring participants together to work on evaluation exercises in groups. This has the potential to bring community-oriented concerns and altruistic preferences to the forefront.

Looking ahead, preference elicitation approaches that take community preferences into account can become valuable sources of knowledge for public consultation efforts on pandemic prevention and relief efforts. Effective pandemic response depends on all of us. It is a collective endeavour in which we engage with others and for others. It is important that this communal perspective is reflected in our valuation work.

For further information contact **Dr Ruben Sakowsky** ([ruben.sakowsky@abdn.ac.uk](mailto:ruben.sakowsky@abdn.ac.uk)).

## Economic insecurity and population mental health in the COVID-19 era

An increased fear of exposure to adverse economic events is one influence the COVID-19 crisis is having on population mental health. The recent 'Life Under Lockdown' report from King's College indicated the incidence of individuals fearing job loss or financial difficulties is around three to four times higher than observed in more stable times.

In past research<sup>1</sup>, funded by the ESRC, we established the causal negative effect of economic insecurity on mental health. An important pattern which emerged from this research was that a fear of future adverse economic events is more damaging to mental health than the experience of such events, and the effects are experienced regardless of expectations being realised.

Our recent discussion paper<sup>2</sup> indicates that individuals' mental health can recover relatively quickly from exposure to economic insecurity. Governments and employers may already have the foundations of effective policies to limit the exposure period and reduce the burden on population mental health.

Prior to the COVID-19 crisis, plans to improve working practices and reduce the substantial economic burden of poor workplace mental health were being formed. At the UK level, this resulted in the Good Work Plan. In Scotland, the Scottish Government proposed the Fair Work Action Plan. By addressing economic insecurity, concrete policy proposals informed by these plans will be important in limiting the mental health effects of the current crisis.

Mental health policies within workplaces will also be crucial. There is an increasing awareness of the role of Human Resources policies in improving workplace mental health. However, workplace mental health policies are not always consistent with employment practices. Policies regarding contracts, living wages, and living hours can also address the mental health effects of economic insecurity.

In addition to improving mental health, effective policies may also improve economic productivity. Our recent report<sup>3</sup> for the Productivity Insights Network demonstrated that industries with lower levels of insecure employment are also more productive. Reducing economic insecurity is good for both business and population mental health. These outcomes have always been important. In the post-COVID-19 era they are likely to be vital.

1 Kopasker, D., Montagna, C. and Bender, K.A. (2018) 'Economic insecurity: a socioeconomic determinant of mental health', *SSM – Population Health*, 6, 184-194. (<https://doi.org/10.1016/j.ssmph.2018.09.006>)

2 Kopasker, D., Montagna, C. and Bender, K.A. (2019) Insecure lock-in: the mental health effects of anticipating insecure employment, *Discussion Papers in Economics and Finance*, 19:7. ([https://aura.abdn.ac.uk/bitstream/handle/2164/13117/Kopasker\\_et\\_al\\_2019\\_Insecure\\_Lock\\_in\\_CELMR\\_DP19\\_7.pdf](https://aura.abdn.ac.uk/bitstream/handle/2164/13117/Kopasker_et_al_2019_Insecure_Lock_in_CELMR_DP19_7.pdf))

3 Kopasker, D. and Montagna, C. (2019) Insecure employment and mental health: one pathway in the productivity puzzle, Small Project Report, Sheffield PIN – Productivity Insights Network, University of Sheffield. ([https://productivityinsightsnetwork.co.uk/app/uploads/2019/12/Project-Report\\_Kopasker\\_October2019.pdf](https://productivityinsightsnetwork.co.uk/app/uploads/2019/12/Project-Report_Kopasker_October2019.pdf))

For further information contact **Dr Daniel Kopasker** ([daniel.kopasker@abdn.ac.uk](mailto:daniel.kopasker@abdn.ac.uk)).



## Critical decisions – who goes to ICU?

Deciding whether or not a patient might benefit from intensive care is a clinical and ethical challenge. Outcomes of treatment can be uncertain, patients are often too sick to engage in discussion, and there is little professional guidance or training available.

The COVID-19 pandemic has intensified these challenges. The National Institute for Health and Care Excellence (NICE) have developed a 'COVID-19 rapid guideline on critical care in adults' (<https://www.nice.org.uk/guidance/ng159>) to help doctors make such decisions. The guideline makes use of research we undertook to understand and support consultants in making ethical decisions.

Funded by the NIHR, we conducted a discrete choice experiment (DCE) to investigate what factors determined decisions to admit patients to Intensive Care Units (ICUs). Informed by a review of the literature and ethnographic research observing how doctors make these decisions, the factors (attributes) included in the DCE were:

- The patient's age.
- How sick the patient was.
- What the patient's life was like before they went into hospital.
- Whether the family wanted the patient to be treated in ICU.
- If the patient had other illnesses.
- How severe any other illnesses were.
- If there were enough doctors and nurses on a ward where a patient would have care.
- How the junior ICU doctor thought the patient was doing.

The patient's age had the largest impact at admission followed by the views of their family and severity of other illnesses. How sick the patient was had less impact than how the junior ICU doctor thought they were doing. The least important factor was if there would be enough doctors and nurses on a ward where a patient would have care.

Informed by the DCE, we developed a decision support pack. NICE has recommended the use of our decision support pack in their 'COVID-19 rapid guideline on critical care in adults'. We hope our research can help all those involved in difficult decisions about who to admit to ICU during the COVID-19 pandemic and beyond.

Bassford, C.R., Krucien, N., Ryan, M., Griffiths, F.E., Svantesson, M., Fritz, Z., Perkins, G.D., Quinton, S. and Slowther, A.-M. (2019) 'U.K. intensivists' preferences for patient admission to ICU: evidence from a choice experiment', *Critical Care Medicine*, 47(11), 1522-1530. (<http://dx.doi.org/10.1097/CCM.0000000000003903>)

Read the full research report at: <https://www.journalslibrary.nihr.ac.uk/hsdr/hsdr07390>.

For an easy read version and a 2-page summary of the project: <https://warwick.ac.uk/fac/sci/med/research/hscience/sssh/research/intensive/>.

For further information contact **Professor Mandy Ryan** ([m.ryan@abdn.ac.uk](mailto:m.ryan@abdn.ac.uk)).



## The NHS healthcare workforce: the long and the short of it

The central message of "stay at home, protect the NHS, save lives" indicates the underlying differences between the short and long term. While the strategy may result in exactly the same number of patients flowing through the system in total, it is the rate at which they require treatment that is key. Much of the initial focus within the media had been on the availability of machinery and in particular ventilators to cope with the peak in demand. However, the NHS is a person-based service and requires a workforce competent in the use of that technology. Such an unprecedented spike in demand for such technology has its own challenges and new machinery cannot be built overnight, but there is a similar issue for staffing. The NHS workforce is comprised of a variety of occupations, many of which require specialised training which can often take years to complete. It takes time to train specialists, whether they are nurses specialising in intensive care medicine or consultants in emergency or intensive care medicine. Therefore, giving time to the NHS in order to spread the load for existing specialised staff, while allowing additional training for other staff to move into the areas where they are needed is essential. Once we are over this first wave, we can expect calls for the additional stockpiling of equipment to allow the system to cope with any future outbreaks. But what does it mean for future staffing? Some immediate staffing shortages have been met by retired staff answering the call to return at this time of crisis, with medical students also graduating early to join the cause. However, the need to free up valuable staffing resource to fight coronavirus has resulted in the cancellation of many elective procedures. If coronavirus is here to stay, in one form or another, that cannot be a long-term solution. Now might be the time to consider whether the NHS has enough staff within the system in general, whether they are of the right type and what resource might be required to ensure the NHS workforce is able to continue to care to the standard that they, and we as a society, wish.

For further information contact **Dr Diane Skåtun** ([d.skaton@abdn.ac.uk](mailto:d.skaton@abdn.ac.uk)).





## Welcoming new researchers to HERU...

Many congratulations to **Dr Ruben (Ben) Sakowsky** for successfully completing his PhD. Ben explored how economic preference evaluation methods differ in the degree to which they pick up altruistic preferences, non-consequentialist normative values, and community-orientedness and demonstrated the value of deliberative approaches that bring participants together to work on evaluation exercises in groups (see Page 2). Ben joined HERU in March as a Research Fellow working on a project analysing data from a laboratory experiment eliciting individual and collective health preferences from participants via the use of discrete choice experiments and computer-based interpersonal deliberation. The project will investigate the transformative effects of interpersonal deliberation on participants' preferences, the difference between self-interested and other-regarding preferences, and the contrast between collective and individual agency.



**Dr Mesfin Genie** joined HERU as a Research Fellow in January. Prior to this, he completed his PhD in Economics at Ca' Foscari University of Venice. His PhD investigated the use of stated preference experiments in health economics, applied to kidney transplantations. During his PhD Mesfin spent six months at HERU exploring attribute aggregation as a decision heuristic in DCEs and described this period as a visiting PhD student as "important in shaping my research interests in choice modelling applied to health economics and to achieving my current role". Mesfin is currently exploring how people process the cost attribute in DCEs and is working on a project looking at preferences in the treatment of metastatic prostate cancer.



## Honours students contribute to our Genomics Research Project

From January to March, HERU hosted two final year Medical Sciences students, Quinn Heppe and Florence Richards, to work on their Honours year thesis projects. Quinn and Florence worked with **Lynda McKenzie, Michael Abbott, Rodolfo Hernández** and **Mandy Ryan** (and our geneticist colleagues) on the costing component of our Chief Scientist Office (CSO) funded project looking at the economics of whole genomic sequencing.

## NEW Research Funding

The National Institute for Health Research (NIHR) have awarded a £1 million research project to Professor Janet Clarkson, University of Dundee, Professor Craig Ramsay, Health Services Research Unit (HSRU), University of Aberdeen, and **Marjon van der Pol** and **Dwayne Boyers** of HERU, to examine 'Selective Caries Removal In Permanent Teeth (SCRIPT)'.  
<https://www.abdn.ac.uk/health-economics-research-unit/news/2020/09/2020-09-23-nihr-funding-heru/>

## Recent HERU Blog posts...

Some of the HERU research featured in this Newsletter is also featured in our HERU Blog. The most recent Blog post expands on our 'Economic insecurity and population mental health' research and highlights the mental health ramifications of the likely increase in economic insecurity due to the COVID-19 crisis. The post suggests that suitable policy and workplace responses to reduce economic insecurity will in turn improve mental health and also workplace productivity. We have other upcoming Blog posts that will reflect the relevance of our research to the COVID-19 situation.



Our work on evaluating whole genomic sequencing for the diagnosis of rare disorders is also featured in the Blog. The post highlights the importance of identifying what matters to patients and including that in the evaluation process. Earlier in the year the Blog looked at the effectiveness and cost-effectiveness of different ways to reduce severe obesity, and we also reflected on the launch event of the Scottish Health Economics (SHE) group.

You can catch up on all our Blog posts at: <https://www.abdn.ac.uk/heru/blog/>.

## HESG Winter Meeting

**Mandy Ryan, Marjon van der Pol** and **Xuemin Zhu** attended the *Health Economists' Study Group (HESG)* meeting in Newcastle in January. Marjon and Xuemin had papers presented at the event, with Marjon's paper looking at bias in personalised decision aids used by doctors and Xuemin's paper, informed by her PhD research, examining the role of risk attitudes and personalities in General Practitioner uptake of procedural or specialist services in rural areas. Mandy and Xuemin chaired sessions and Marjon was a discussant in a session.

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