







Department of Nursing & Midwifery Research Newsletter



Welcome to our Research Newsletter from the Department of Nursing and Midwifery at the University of the Highlands and Islands.

Welcome to the start of our new undergraduate intake and semester. Amongst the busyness of preparing a new cohort for future nursing careers and enrolling postgraduate students our research activity continues to thrive. This time of year brings a renewed sense of energy aided by the presence of students back on campus and our commitment to deliver excellent teaching and research.

As our articles below show we conduct applied research which aims to make services, care, health and ultimately the quality of peoples lives better. Many of our studies are driven by complex problems which require innovative and collective solutions. For example, working with academics, clinicians, and a tech company to create an app to enable people waiting for joint surgery to manage their pain and be in the best condition possible for their operation (see Joint Academy project below). We have also been working with Move on Up, a Highland based film production company, to share our research activity via short video clips (embedded within the Care Home piece and PhD Student Profile below), with others to follow in future newsletters.

This will be our last Department of Nursing and Midwifery Research Newsletter. We know that

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The Joint Academy
Project

COVID-19 Research

Care Home Workers'
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COVID-19 Pandemic

The Last Aid for Young
Scots study

our collective asset of researchers is greater than the sum of their individual parts therefore we are planning to collaborate with our wider colleagues in the School of Health, Social Care and Life Sciences to create a School Newsletter – watch this space!



<u>Dr Michelle Beattie</u> Senior Lecturer and Assistant Head of Research

<u>PhD Student Profile –</u> <u>Hannah Hollinger</u>

Recent Publications



What do we do?

Our research aims to foster a strong research community in the Highlands and Islands and build research collaborations nationally and internationally. This enables us to address key health questions relevant to Scotland and beyond and conduct high quality research that improves health and wellbeing within the Highlands and Islands. We conduct research to improve health and wellbeing in remote and rural regions that has international significance and spans urban populations. Our research expertise includes:

- Health promotion and disease prevention
- Active health
- Health and social care interventions and evaluation
- Improvement science
- Nurse education

You can view our Research Strategy here.

The Joint Academy project: a digital health study to help pre-operation patients

In an effort to support patients on the joint replacement waiting list for surgery researchers within the Department of Nursing and Midwifery are working with colleagues at NHS Highland (NHSH) and Joint Academy (JA; a Swedish start-up SME) to explore the use of an app to facilitate prehabilitation. The app connects patients with a registered physiotherapist, provides information about chronic joint pain and encourages users to undertake tailored exercises for five minutes a day to help reduce pain and restore movement. JA sponsored clinical trials in Sweden have demonstrated the potential for this technology to improve surgical outcomes.



The current study is designed to establish the feasibility of the JA app for use in NHSH. We have successfully recruited 100 people to use the app for 6 months. We are evaluating participant enrolment and engagement alongside any changes in self-reported pain scores, physical function, and quality of life. We will also conduct interviews to explore patient experience and engagement with the app. Data collection will be completed in the early part of 2023.

If this project is successful, the UHI/NHSH/JA partnership will look to develop a multi-centre RCT of the JA platform to evaluate its wider, and longer-term clinical and cost effectiveness. This would also include a substantial process evaluation to further explore patient experiences and to explore who the programme works best for and in what context.

Anyone who would like more information about the study can contact **Professor Trish Gorely**.

COVID-19 Research



<u>Professor Gill Hubbard</u> has been invited to join a new COVID-19 Adaptations Expert Advisory Group which is part of the Scottish Government's Covid Ready Society Division. The COVID-19 Adaptations Expert Advisory Group, chaired by Professor Tim Sharpe, is being established to bring together scientists and experts to advise the Scottish Government on COVID-19 adaptations and innovations to our building environment (in non-clinical settings), in order to improve Scotland's resilience to COVID-19.

Gill is one of the lead researchers on <u>CHARIS</u> which has investigated rates of adherence to behaviours intended to reduce the transmission of coronavirus in Scotland and the mental and general health of the Scottish public during the ongoing pandemic.

The latest CHARIS project is the academic researchers working with NHS Highland and NHS Grampian Public Health teams so that behavioural science theory and empirical research

feeds directly into their practice to improve infection control in these regions. Both Gill Hubbard and Michelle Beattie from the Department of Nursing and Midwifery, UHI are involved in this project.

Gill was also one of the lead academics informing the <u>Scotland Covid 19 Public Inquiry</u> with Prof Sandra MacRury UHI and Kirsten Broadfoot Sterena Consultancy. The report by the UHI team was cited in a <u>BBC News report</u>. One of the key conclusions was:

"The inhumane policy for care homes, where residents were unable to see their families, contained in their rooms 24/7 and where some residents died alone, should be acknowledged and not repeated."

Gill is also currently leading a project to examine health and social care service provision in rural and island communities during the pandemic. In rural and island communities, where there is usually only a handful of health and social care services available, the impact of pandemics and other types of emergencies can be considerable. Some services stopped, reduced, and/or adapted and switched to telephone or video during the pandemic. Lack of funding, workforce shortages and availability of technology will have influenced how services responded during the pandemic. Yet, these factors affect all services and therefore cannot explain all of the variation in service provision during the pandemic. In this study, we will investigate the impact of the pandemic on services of other factors such as, knowledge, skills, professional and personal identities, emotions, beliefs about capabilities, and beliefs about risk of Covid-19 and disease severity in order to understand staff's behaviours relating to service provision and service users' behaviours relating to service use in rural areas. We will do this by conducting surveys and interviews of service managers and service users (patients and carers) in rural and island regions of Scotland. The study will lead to improved rural and island policy-making. Health and social care policy-makers will be provided with clear evidence about how and why some services closed and others stayed open during the pandemic and adaptations services made. This evidence will help them make informed decisions about rural and island primary care and community-based service sustainability.

Please contact **Prof Gill Hubbard** for further information.

'Running on empty:' Care Home Workers' Experiences During the COVID-19

Pandemic

The COVID-19 pandemic created unprecedented challenges for health care workers (HCWs) globally. Those working in care home settings were especially impacted due to caring for ageing residents with associated multimorbidity, cognitive impairments, high resident to staff ratios and shared resident facilities. We worked with Balhousie Care Group (owners of 26 care homes in Scotland) and colleagues from Northumbria University to explore the stress and coping experiences of health care workers (HCWs) in care home settings in Scotland during the COVID-19 pandemic. A cross-sectional mixed methods study was conducted using an online survey and interviews. We reported on our preliminary findings in a previous newsletter. A brief overview of the study is available via our video below and full details of the study are available in our publication.





The study highlights the personal sacrifices made by HCWs, and the importance of tailoring generic infection reducing strategies to a care home environment to take cognisance of residents with impaired cognition.

Additionally, the study acknowledges the strong sense of family within this HCW community and how this aided their ability to cope. Our study provides an opportunity to act on these findings to reduce further physical and mental health impact on HCWs and to commend their efforts and commitment during this crisis.

Please contact <u>Dr Michelle Beattie</u> on behalf of the Care Home Research Team for any further information. We would like to thank the HCWs at Balhousie who gave their time to participate in the study during this exceptional time.

Developing death literacy in young people to support the development of Compassionate Communities in the Highlands – The Last Aid for Young Scots study

Compassionate Communities is a public health approach to palliative care which uses community development frameworks to enhance personal and community death literacy, defined as 'a set of knowledge and skills that make it possible to gain access to understand and act upon end-of-life and death care options.' Given that palliative care need in Scotland is projected to increase by up to 20% by 2040, the promotion of death literacy is pressing.

To develop death literacy locally, Highland Hospice delivers Last Aid as a half-day educational course to adults living in Highland. Our <u>recent evaluation</u> showed that participation in Last Aid resulted in a 30% increase in intent to undertake 'thinking ahead activities' e.g., making a will, anticipatory care planning etc. Although Last Aid has demonstrated local success in Highland, uptake to date has predominately been by females aged >45 years, with limited engagement from young adults. Additionally, death education is not commonplace in schools. Taken together these factors place limits on the principle of early intervention and public health promotion across the life course.

Working with Highland Hospice, our Last Aid for Young Scots study seeks to understand if there is an appetite for death education courses in local young people and, if yes, how these might be tailored to make them useful and acceptable to young people. We will also use Normalisation Process Theory to analyse data to identify factors which might help or hinder their delivery. We have just launched recruitment to our study, and we are running on-line focus groups with a range of stakeholders throughout this autumn. If you are a young person aged 16-26 or a teacher/educator or someone who supports young people, or someone who has attended/facilitated a Last Aid course we would value your participation in our study.

For more information visit here or e-mail Dr Clare Carolan.

PhD Student Profile – Hannah Hollinger



Since 1997, when I obtained my degree in Leeds and qualified as a nurse, I have worked mainly in the area of Neurology. This specialist care has remained my focus as an ever-advancing area requiring innovative adaptation as treatments and therapies advance. Throughout nearly 25 years of general nursing experience, I have developed specialist knowledge and skills in managing Neurological, long-term conditions and terminal illnesses, whilst having the privilege of working with individuals who need to access these services. Life in London entertained me for a couple of years post-qualification, but then a desire to have greater rural access took me to Manchester and then on to Sheffield.

I worked for Clinical Research Networks, at the University of Sheffield, as a research nurse and UK speciality MND research Co-ordinator. I was both a principal and co-investigator, and co-applicant on a number of grants, whilst also co-ordinating multi-centre MND studies throughout the UK. During this working period, I supported many PhD students and projects helping them to achieve their goals and enhance their career journey. Despite a strong desire to undertake my own PhD, at the time I was unsuccessful at interview for an NIHR PhD. Although, I did not give up on this dream, family life and kids took over.

Living and working near the Peak District in Yorkshire kept me entertained with the delights of climbing, biking and running in my spare time and all that it has to offer an active family. However, having grown up in the Welsh countryside and my husband being from Northern Ireland we both thought a move to Scotland would provide a more rural lifestyle for the children, much like our own childhoods, ticking the 4 nations challenge for the family. High mountain views, snow, water, and

wildlife are where my happy places lie, and Highland makes my heart sing at every turn.

Sadly, 18 months after moving to Scotland, and just after I had been offered the opportunity to start a PhD, life radically changed for our family. I feel it was partially this trauma that inspired me to ensure that I discovered any new positives that Highland life had to offer. There was a need to add a new happier story. Then, I discovered cold-water swimming with a group of close friends. We started swimming in local Lochs and rivers and were excited by how much choice there was locally in the Cairngorms. Each venue provided new challenges and adventures, and none of us really noticed in our venturing the seasons change from Summer to Autumn and then into Winter. The odd comment of 'it's a bit colder today' or 'I think I need some gloves; my hands have gone numb'. But alongside these comments, the acknowledgement of a full endorphin rush from the cold that would stay with us for the day

and motivate exploration of the next cold immersion experience. We felt energised and healthier, and continue to seek out the next cold-water experience, in fact during the summer months we even miss the cold!

A move to Highland in 2016 and the years that followed, had felt like a move away from the research world and a career I had thrived in. However, a successful application to the City Deal for a funded PhD fuelled my passion to improve lives through evidence-based research. I am 2½ years into a 5-year part time PhD and loving the journey of blending my passion for cold water with the field of Neurosciences. My project MS_FaCtS aims to determine the feasibility and acceptability of cold showering as a support mechanism for the self-management of Multiple Sclerosis fatigue. Find out more about the project by watching this short film.



I have always had a commitment to improving clinical care, symptom management and the experience through patients and carers journey. Throughout my nursing journey I have aimed to be a creative and innovative practitioner who has been driven to improve both the clinical, academic and research environment. Combining these skills to become an independent researcher would ensure that I could directly focus on embedding research outcomes within clinical settings for the benefit of patients and carers.

Please contact <u>Hannah</u> for further details and visit our <u>website</u> to find out more about PhD students within the department.

Interested in doing a PhD?

If you are passionate about an area of healthcare practice and want to make a research contribution to your field, a PhD could be the route for you. Doing a PhD provides you with the opportunity to go to the depths of critical enquiry into a chosen topic enabling exponential personal and professional growth. Doctoral studies are challenging, but we provide you with support and encouragement every step of the way. Our department research team gets to know you which enables tailored supervision to your individual learning needs and styles. We can also provide inter-department and across University supervision to ensure students have access to the right supervisors. Students also have access to the University's Graduate School which provides access to training and guidance on administrative procedures.

Anyone interested in conducting a PhD please contact <u>Dr Michelle Beattie</u> for informal enquiries.

Recent Publications

Beattie M, Carolan C, Macaden L, MacIver A, Dingwall L, MacGilleeathain R, Schoultz M (2022) Care Home Workers Experiences of Stress and Coping During Covid-19 Pandemic: A Mixed Methods Study. *Nursing Open*. https://doi.org/10.1002/nop2.1335

Coleman, S., Wray, F., Hudson, K., Forster, A., Conroy, S., Tremyl, J., Shenkin, S.D., Nixon, J., Fader, M., Goodwin, V.A. and **Woods, D.** (2022) Using consensus methods to prioritise modifiable risk factors for development of manifestations of frailty in hospitalised older adults. *Nursing Open*.

http://doi.org/10.1002/nop2.1370

Edwards, J, Coward, M & **Carey, N** (2022), Barriers and facilitators to implementation of non-medical independent prescribing in primary care in the UK: a qualitative systematic review, *BMJ open*, vol. 12, no. 6, e052227. https://doi.org/10.1136/bmjopen-2021-052227

Macaden, L.; Broadfoot, K.; **Carolan, C.; Muirhead, K**.; Neylon, S.; Keen, J. (2022) Last Aid Training Online: Participants' and Facilitators' Perceptions from a Mixed-Methods Study in Rural Scotland. *Healthcare* 10, 918.

https://doi.org/10.3390/healthcare10050918

Masot, O, Cox, A, Mold, F, Sund-Levander, M, Tingström, P, Boersema, GC, Botigué, T, Daltrey, J, Hughes, K, Mayhorn, CB, Montgomery, A, Mullan, J & **Carey, N** 2022, Decision support-tools for early detection of infection in older people (aged> 65 years): a scoping review, *BMC Geriatrics*, vol. 22, no. 1, 552.

https://doi.org/10.1186/s12877-022-03218-w

Piano, M.E., Veerhuis, N., Edwards, J., Traynor, V. and **Carey, N.,** (2022). Having the conversation about vision for safe driving with older adults: an exploratory study of eyecare professional experiences in England and Australia. *Clinical and Experimental Optometry*, pp.1-9.

https://doi.org/10.1080/08164622.2022.2105642

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Meet our Research Staff

- Neil Angus
- Dr Michelle Beattie
- Marie Cameron

- Dr Nicola Carey
- <u>Dr Clare Carolan</u>
- Professor Trish Gorely

- <u>Hannah Hollinger</u>
- Professor Gill Hubbard
- Julie Munro

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