

Supporting nursing, midwifery and allied health profession research in Scotland

Introduction

Scottish universities have an exceptionally strong research profile. Research led by nurses, midwives and allied health professionals (AHPs) in Scotland makes an important contribution to this overall excellence. In the 2014 Research Excellence Framework (REF) exercise, most research led by nurses, midwives and AHPs across the UK was submitted under REF Main Panel A, Unit of Assessment 3 (UoA), where 31% of the research was judged to be world-leading and 50% internationally excellent. This UoA scored particularly strongly for impact with 47% of submissions rated world-leading and 41% internationally excellent.¹ Research by nurses, midwives and AHPs featured strongly in submissions to the sub-panel.

Research led by these disciplines lies at the heart of a range of critical issues for health and social care in Scotland, including:

- responding to the pressures on health services and the changes required for an effective integrated health and social care service
- working in partnership with people who use services and their significant others
- informing and improving the way that services are delivered
- ensuring an effective public health agenda
- developing care strategies for the population across the life course
- supporting those living with long-term conditions and developing effective interventions for people to enjoy a good quality of life for as long as possible
- ensuring that palliative and end of life care is person-centred and accessible by all.

The evidence suggests, however, that there is much work still to be done. Three areas are of particular importance for the future:

Supporting nursing, midwifery and allied health profession research in Scotland

Purpose:

This paper is the product of a Council of Deans of Health Scotland working group on NMAHP research. It sets out the current policy context for research and key commitments from Council of Deans of Health Scotland members.

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1. Building capacity

The number of researchers in our disciplines remains small. In Scotland there are only seven AHP professors and 29 nursing and midwifery professors.

The Scottish Government's *Setting the Direction* document published in February 2014 set out six strategic aims for nursing and midwifery education in Scotland.¹ Aim 5 is to 'strengthen clinical academic collaboration to ensure that research and evidence underpin and drive improvement in quality'. The document goes on to state that 'excellence in research quality, attention to the growth of research-based capacity in the university and NHS workforce and partnership between universities and clinical services' is required to achieve this aim. It is clear therefore that a public policy imperative exists to support the growth of NMAHP research. There is however also a challenge which universities in partnership with government and the workforce must strive to meet.

There is still work to be done to make the connection between research, education and evidence-based practice consistently understood and valued for nursing, midwifery and the allied health professions. Part of the solution must lie with the professions through the promotion of research awareness, competency and capacity during pre-and post-registration education. In addition the early identification and support of those with an interest in research careers and the establishment of clearer and broader career pathways encompassing research is vital.

Increasing research capacity in universities: developing the academy

Investment in healthcare professionals who hold a wholly academic role (i.e. those who both undertake research and help foster research skills within universities by teaching, supervising and inspiring students and more junior academics) is central to growing the research base. However, there has been little focus on growing the research capacity of university-based NMAHP academics and this needs to be addressed.

Academics in universities need time to engage in research. In nursing, midwifery and allied health, academic time is often taken up by negotiating contracts for placements, high teaching workloads and fulfilling obligations required by the professional and regulatory bodies. Combined with a longer than usual academic year, this has in some cases limited the opportunity for academics to participate fully in research. To address this issue, there is a need for a reorientation towards a system that supports the development of the wider academy through stable infrastructure funding across the disciplines and across all institutions.

Case Study: Glasgow Caledonian University

Healthcare Associated Infections (HAI) can be an unintended consequence of healthcare delivery. They are caused by a range of organisms but are often preventable. Glasgow Caledonian University (GCU)-led research has reduced avoidable infections in healthcare in the UK and Europe by stimulating policy debate and investment in new healthcare practice and influencing policy decisions, evidence guidelines, and educational practices. Important changes have been made to national and international approaches to methicillin-resistant *Staphylococcus aureus* (MRSA) screening with cost savings of £7.5 million to the NHS. Twenty eight European countries now use the HAI point prevalence survey validation method determined by GCU's research.

1 <http://www.gov.scot/Resource/0044/00443655.pdf>

Increasing clinical academic research

Over the past 20 years in Scotland there has been important investment in clinical academic research career development for nurses, midwives and AHPs. The NMAHP performance in the 2014 REF goes some way to demonstrate the impact of this investment. The recent paper *'Developing a Strategy Supporting NMAHP Research & Research Skills in Scotland'*², sets out a vision for NMAHP clinical academic careers as well as five key objectives that need to be put in place in order to advance clinical academic NMAHP activity:

1. Assessing need and developing demand
2. Developing strategic partnerships and supportive environments
3. Development of a central collaborating/co-ordinating hub for NMAHP research
4. Identifying, developing and valuing NMAHP researchers
5. Evaluation and advisory board

CoDH Scotland is supportive of this strategic direction and is keen to work in partnership with the Scottish Government and other relevant partners in making this vision a reality. In addition, CoDH Scotland believes that the strategic function of the NMAHP Research Unit (NMAHP RU) has a key role to play in progressing these five objectives. NMHAP RU is a Scotland-wide research unit based at the University of Stirling and Glasgow Caledonian University. Established in 1994 as the then Nursing Research Initiative for Scotland, it now focuses on applied research for nurses, midwives and allied health professionals to enable them to 'make a difference to the lives of the people of Scotland and beyond' and also aspires to be 'an internationally renowned and innovative centre of excellence for NMAHP Health and Social Care research'.³ CoDH Scotland will continue to work with NMAHP-RU to further develop the depth and breadth of partnerships to advance clinically relevant research and researchers.

Connecting across disciplines

Universities provide an ideal environment for collaborative working with other disciplines. There are significant opportunities to connect for example, technology, engineering, bio-science, computing, social science and the arts to the applied research expertise and questions generated by nurses, midwives and AHPs. There may be benefits in increasing discipline-bridging support to create more opportunities for academics from other disciplines to work with nursing, midwifery and AHP researchers.

² *Developing a Strategy Supporting NMAHP Research & Research Skills in Scotland*. Report by the Chief Scientist Office Nursing, Midwifery and Allied Health Professions Research Unit. 2014

³ NMHAP Research Unit - <http://www.nmahp-ru.ac.uk/about-us/vision-and-objectives/>

Case Study: University of Stirling

The University of Stirling runs a Clinical Academic Fellowship scheme that allows students over a five-year full-time period to undertake a specific programme of research under the supervision of an experienced researcher, whilst also gaining experience in teaching and maintaining their clinical post. Students spend 50% of their time on their research which leads to a PhD submission, 25% teaching and 25% in their clinical role.

The recent research strategy from the Scottish Government's Chief Scientist's Office (CSO), *Delivering innovation through research*⁴ fails to take account of this potential by failing to include anything in relation to NMAHP research, and this needs to be addressed in the strategy implementation plans and in a future revised strategy.

2. Sustaining investment in research

In the context of challenging public spending requirements and significant changes to Scotland's research infrastructure, we need commitments from major research funders to applied health research that will see it flourish, unlocking the potential demonstrated by REF 2014.

CoDH Scotland welcomes the commitment made by the UK Government in the Comprehensive Spending Review 2015 to invest in research, including increasing the research budget within the then (UK) Department for Business, Innovation and Skills (BIS)⁵ in line with inflation. Our disciplines are responding to this agenda and to engage in delivering against the wider strategic aims of funders (for example the CSO's, the Engineering and Physical Sciences Research Council's (EPSRC) 'healthy nation' outcomes,⁶ the European and Social Research Council's (ESRC) mental health and wellbeing strategy,⁷ the Medical Research Council's (MRC) infections and prevention agendas and the National Institute for Health Research's (NIHR) Health Technology Assessment priorities.⁸

Applied health research receives less funding than research focused on the biomedical foundations of disease. The UK Clinical Research Collaboration found that in 2014, 23% of total health research funding was spent on research into the underpinning nature of disease, 30% on aetiology, 5% on prevention, 4% on disease management and 10% on treatment evaluation.ⁱⁱ A high proportion of this more applied research is reliant on government-backed funding. In 2014, the UK Government funded just 2% of underpinning research and 3.8% of aetiology but funded 32.6% of preventative research and 46.8% of treatment evaluation.ⁱⁱⁱ The NIHR in particular has made a significant contribution to research training and research by nurses, midwives and AHPs. However, there is limited scope for Scottish HEIs to access funds through the NIHR because of the limited financial contribution the Scottish Government contributes to the scheme. Whilst there is some Scotland-only funding available, this does not equate, pro-rata, to the levels of funding available by HEIs in the rest of the UK. CoDH Scotland believes that NMAHP researchers in Scotland are at a disadvantage because they cannot access the breadth of funding or expertise available elsewhere in the UK. This

⁴ <http://www.gov.scot/Publications/2015/10/5164>

⁵ Now the 'Department for Business, Energy and Industrial Strategy' (BEIS) (as of July 2016)

⁶ <https://www.epsrc.ac.uk/newsevents/multimedia/prosperity-outcomes-healthy-nation/>

⁷ <http://www.esrc.ac.uk/research/research-topics/health-and-wellbeing/>

⁸ <http://www.nets.nihr.ac.uk/programmes/hta>

Case Study: Dr Julie Watson

Julie registered as a nurse in Scotland in 1993 and worked clinically for 14 years, latterly as a staff nurse in a hospice until 2009. During this time she undertook two secondments as a research assistant on projects developing end of life care in care homes.

She moved to work as a Research Fellow at Stirling University Cancer Care Research Centre for 16 months and was then awarded an Economic and Social Research Council (ESRC) studentship for an MRes (Sociology) and a PhD (2011-15) at the University of Edinburgh examining relationships between people with dementia and care staff in a care home.

Since completing her PhD, Julie has worked on an ESRC secondary data analysis project on challenging assumptions about dementia and is currently on a fixed-term part-time contract as a postdoctoral Research Fellow at Edinburgh Centre for Research on the Experience of Dementia, mainly writing research bids to secure further opportunities to explore the needs of people living with dementia and care environments.

view was also reflected in the 2014 REF panel discussions held at the Council's AGM in Belfast on 27 January 2015. CoDH Scotland believes that the Scottish Government should therefore renegotiate the existing funding relationship with the NIHR in order to increase NMAHP access to research funding and expertise, and in particular the *Research for Patient Benefit* Programme (RfPB).⁹

We must ensure that research funding given to universities on the basis of REF results is leveraged to actively promote the benefits of the unique professional perspectives brought by nurses, midwives and AHPs to research. NMAHP researchers are actively engaged in a variety of novel and sophisticated methodologies in the development and evaluation of complex interventions. More awareness and recognition is needed of the range of expertise and experience that NMAHP researchers bring to multidisciplinary research teams.

3. Getting the architecture right

There are a number of sources of potential funding for nursing, midwifery and AHP research in universities. These include the EU, CSO, RCUK, industry, charities, and trusts such as the Wellcome, Leverhulme and Carnegie trusts. With the uncertainty concerning EU research funding 'post-Brexit' careful consideration of the potential impact of this is needed. Although there are examples of research led by nurses, midwives and AHPs that has been funded through large-scale collaborative programmes, such as RN4CAST¹⁰ and FIRE (funded through the EU 7th Framework Programme¹¹), these are relatively small in number. Many researchers lack the experience of forming high level collaborations that can successfully bid into major funding streams at UK or EU level, particularly with the emphasis in Horizon 2020 on collaboration with industry and translation of research findings to the marketplace¹².

It is important to ensure that the funding architecture within Scotland is supportive of excellence wherever it is found. CoDH Scotland supports the 'dual funding system' for research (QR funding based on the REF exercise and separate funding from the UK Research Councils).

Ways forward

We need to grow research capacity within our universities and health and social care providers. Possible ways of doing this include promoting research careers and increasing the number of available research positions, specifically:

⁹ <http://www.nihr.ac.uk/funding/research-for-patient-benefit.htm>

¹⁰ <http://www.rn4cast.eu/en/>

¹¹ https://ec.europa.eu/research/fp7/index_en.cfm

¹² <https://ec.europa.eu/programmes/horizon2020/>

Case Study: Dr Jay Lee

Jay registered as a nurse in South Korea, working clinically for five years before commencing the MSc in Advanced Nursing Practice at the University of Edinburgh. This was followed by a PhD (2012-16) that focused on student learning in clinical environments and the further development of research skills.

Jay has published several papers in national and international journals based on his PhD and other research, and he has been offered an Assistant Professorship at the University of Hong Kong – though Jay would very much wish to return to work in Scotland before long.

- Supporting the development of the academy in nursing, midwifery and allied health professions across the whole system, ensuring that academics have time to engage in research to develop the knowledge base for the future
- Developing doctoral training programmes or centres for doctoral training awarded through national competition specifically for nursing, midwifery and the allied health professions
- Scaling up clinical academic and university-based academic fellowships at all levels, creating new post-doctoral and senior research fellowship positions as well as a clearer career progression structure. These could be funded by the Research Councils, Chief Scientist's Office or NIHR
- Increasing the number of students taking up MRes/MClinRes and doctorate places, ensuring that nurses, midwives and AHPs are ready to complete doctorates in order to sustain a strong research base for the professions
- Increase the number of researchers applying for grants on a full economic costing basis. Formal mentorship programmes could be used to encourage this practice.

Capacity for our disciplines can be built not just through support for research positions but also through:

- Targeted investment to support collaborations between NMAHP researchers, other disciplines, the NHS and business to apply new technology, materials and data capacity to deal with health challenges. There is much unexploited potential for such collaborations to generate economic and social benefit for Scotland and to tackle global health challenges.

Focused efforts to support researchers to develop the leadership skills, networks and collaborations necessary to bid successfully into major funding programmes.

- Further commitments from major research funders of applied health research to enable investment to flow to nursing, midwifery and allied health research as part of large scale and long-term programmes.
- Broadening the scope of the CSO Fellowship scheme to include nursing, midwifery and allied health researchers

ⁱ REF 2014 Unit of Assessment summary data

<http://www.ref.ac.uk/media/ref/content/pub/REF%2001%202014%20-%20results.pdf>

ⁱⁱ Ibid. p94

ⁱⁱⁱ UK Clinical Research Collaboration (2015) *UK health research analysis 2014* p. 94