



Royal College
of Physicians

Coleg Brenhinol
y Meddygon (Cymru)



Time for research: Delivering innovative patient care in Wales

July 2019

Research is crucial to excellent patient care

Research in the NHS covers a wide variety of areas, from quality improvement to epidemiology and clinical trials. Research-active hospitals have improved outcomes for patients¹ and many doctors regard research as an important part of their job and a very positive experience.

The Welsh NHS faces many challenges. Staffing shortages and financial pressures clearly cannot be ignored, nor can the need to deliver more integrated care to support patients, but we cannot afford to store up problems for the future by letting research fall by the wayside. In fact, in Wales, our integrated health system may open up more opportunities for population research by allowing more extensive data collection across settings. Investing in research will deliver long-term gains for patients and public health – which is after all what the NHS is there to do.

‘Getting clinicians involved in research, particularly at an early stage, is something I’m very passionate about ... I see collaborative working as a way to counter some of the challenges that trainees face in getting into research and conducting research alongside clinical work.’

Dr Sacha Moore, trainee physician, NHS Wales

High-quality research in the NHS is everyone’s responsibility; it should be a core part of clinical care. It is important that every clinician working in the NHS is research-active: this can mean identifying opportunities for new research, recruiting patients, supporting colleagues or leading trials themselves. Research and innovation should be part of health boards’ core activity and understood to be a key indicator of improving patient care. Hospitals and community settings should increase their research activity and doctors should be supported to pursue research activity, allowing more patients than ever to be involved with or benefit from clinical research.²



Clinicians tell us that they struggle to secure protected time for patient-facing research²

Too many clinicians fit in their research commitments around the rest of their job. With an increasing number of rota gaps in many hospitals, 43% of consultant physicians in Wales tell us that their research is one of the first things to be dropped when the service is under pressure.³

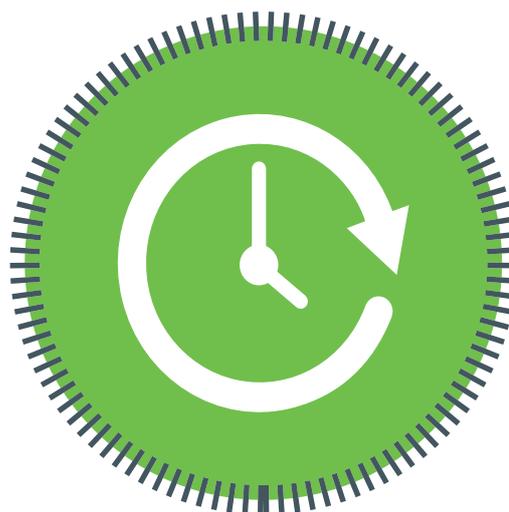
All NHS bodies in Wales should receive a regular report of research activity. An executive director for each health board or NHS trust should be made responsible for promoting research across the wider organisation, coordinating activity across primary, secondary and community care, and reporting on research activity and its impact on a regular basis.

Patients should be made aware of ongoing research activity and given the opportunity to participate where appropriate. This includes observational studies, clinical trials and the use of data from patient records. The results of studies should be disseminated to patients who have participated.

All medical and allied health professionals, including doctors-in-training, should be encouraged and supported to learn more about research methodology and participation during their undergraduate training so that it becomes embedded in their education and training as they move forward in their careers. Staff working less than full time should be given equal support and access to research training and development.

‘Why do research? Healthcare systems are struggling all over the world and standing still is not an option. Only high-quality research can make this better. If we don’t invest in research and learning now, we will not be able to grasp new opportunities to save lives and alleviate suffering.’

**Dr Chris Subbe, consultant physician,
NHS Wales**



Recommendations

The Welsh government should:

- > implement the recommendations of the Reid⁴ and Diamond Reviews⁵
- > provide clear national leadership on the importance of medical research
- > increase quality-related research funding to Welsh universities in 2019/20
- > review clinical research funding streams in Wales, especially if the UK leaves the EU
- > tackle the growing skills gap in STEM subjects, including medical research
- > evaluate schemes such as Sêr Cymru⁶ which aim to increase research workforce capacity
- > work with the medical research community to ensure NHS staff have protected research time.

Health boards and NHS Wales trusts should:

- > ensure that research activity is integral to the work of their organisation
- > ensure that boards receive a regular update on research activity and findings
- > ensure there is a direct link between research teams and the board
- > use job planning to protect time for clinical research
- > provide opportunities to showcase research, including to patients and the public
- > ensure R&D departments are equipped to provide leadership, support and advice
- > ensure transparency for funding and resource allocation
- > facilitate the translation of research into practice across the NHS.²

Doctors should:

- > be proactive in seeking opportunities for their patients to be involved in research
- > be able to easily access available information about current research activity
- > seek development opportunities to equip themselves with research skills
- > support colleagues and their multidisciplinary teams to be research active
- > identify opportunities for improvement in care through research in their daily activity.²

Patients should:

- > feel empowered to ask their care team about opportunities to be involved in research
- > feel empowered to access tools and networks to learn about the benefits, opportunities, participation and involvement in research
- > feel empowered to make informed choices about participating in research.

Health research facilitators* should:

- > support hospitals to enhance their capacity and capability in research
- > support and encourage funding applications from researchers with different backgrounds
- > ensure there is support for research skill development²
- > ensure that funding opportunities reflect priorities for improvement of care and outcomes
- > ensure there is opportunity for collaboration across all areas of clinical care between academia, industry and the NHS that will involve patients.

*including Health and Care Research Wales, Higher Education Funding Council for Wales, Research Capacity Building Collaboration Wales, Healthcare Inspectorate Wales, General Medical Council, royal colleges, the Welsh Government, funders, universities and other stakeholders

Research in practice

Clinicians in Wales outline the importance of research and how they have successfully incorporated it into their working lives.

‘I love the exploring of new concepts, working with enthusiasts, and the learning’

I am a researcher into the physiology of acute illness and the systems that hospitals use to deal with acute deterioration. I worked with colleagues to publish the first-ever paper on early warning scores which identify patients deteriorating on general wards. This has been adopted throughout the UK, Ireland and further afield. This has led to a raft of national and international studies in acute illness and 72 peer-reviewed publications as well as a number of book chapters. I currently combine 2 days of clinical work with 3 days of research which is funded by the Health Foundation. I started out studying for an MD in respiratory pathophysiology, then got interested in acute illness during my first job as a registrar in Wales. With some local support, we set up the first study into acute deterioration that has been quoted over 500 times in the literature.

I love the exploring of new concepts, working with enthusiasts (which many researchers are) and the learning. However, the biggest barriers I still face are a lack of time and money.

I am currently working on a limited contract so I can do more research, but previously I have carried out research during SPAs (supporting professional activities), evenings and weekends, which can be up to 30 extra hours a week. Research grants are largely awarded to those in academic groups, and clinical research remains nationally underfunded.

Find something that you are passionate about, and find someone that is also passionate about this, then play the long game – think 3–5 years rather than 3–5 months for projects. It would really help if the NHS began to fund PhDs and postgraduate degrees to help build a research-literate workforce.

Dr Chris Subbe

Consultant physician in acute, respiratory and critical care medicine, Ysbyty Gwynedd Senior clinical lecturer, Bangor University School of Medical Sciences Improvement science fellow, The Health Foundation Betsi Cadwaladr University Health Board



‘Time in research really does fly very quickly and is very precious’

I currently work as a final year diabetes and endocrinology/GIM specialty registrar at the University Hospital of Wales. During my specialty training, I took time out-of-programme for research (OOPR) which was supported by the RCP Lewis Thomas Gibbon Jenkins Fellowship. The fellowship aims to promote medical research in Wales and enabled me to undertake a fully funded research project at Cardiff University, which led to a higher degree. Thanks to the funding received, I was able to focus fully on my research without the distractions and pressures of life as a specialty registrar in general internal medicine. Moreover, since up to 12 months of research experience can be counted towards accreditation, my certificate of completion of training (CCT) date was not delayed.

By designing and conducting my own study, I gained great insight into life as a clinical academic; this included the inevitable ups and downs of laboratory work and learning the complexity of regulatory approval and research governance. One of the particular highlights has been the opportunity to collaborate with a number of scientists and postgraduate students who I would not usually interact with in the clinical arena. The experience has strengthened my organisational, time management, leadership and interpersonal skills as well as helped me to develop various academic competencies such as scientific writing and application of statistics. The development of new research collaborations will also stand me in good stead in my future career.

I am very grateful for this opportunity and would have no hesitation in recommending time out-of-programme to any trainees in Wales interested in undertaking research. However, it is important to have the outline of the research project, the funding and ideally the ethics approvals ready before the time out of training is taken, as it helps to avoid stressful and unnecessary delays. Although having 2 or 3 years to complete the project and write it up appears sufficient, time in research really does fly very quickly and is very precious.

My out-of-programme research experience made me feel more empowered and aware of the professional pathway I want to follow. I am starting my consultant post at the University Hospital of Wales soon, and thanks to the fellowship, I will be able to continue to do clinical research in collaboration with the local R&D department, which is a very exciting prospect.

Dr Justyna Witczak

Specialist registrar in diabetes and endocrinology
Former research fellow, Cardiff University Centre
for Endocrine and Diabetes Sciences
Cardiff and Vale University Health Board





‘Most of my past research I ended up doing in my family time, sometimes at midnight while my kids slept’

I am currently a lecturer in healthcare sciences in Cardiff University. I teach and supervise research for both undergraduate and postgraduate students. My clinical expertise is pulmonary rehabilitation and oxygen therapy, and I have presented at national and international conferences, contributed to around 15 research papers and I received an award in 2015 for improving physical activity in COPD patients with a full paper published in the *Journal of Respiratory and Pulmonary Medicine*.

The greatest challenge we have is getting the right number of skilled staff in the right place at the right time. A strong research culture framework would enable better service planning, decision-making, and the sustained integration of evidence-based practice. We need to talk more about how valuable research is for our clinical staff to deliver a high-quality service. In my experience, I was under huge pressure in my clinical practice to justify the service I provided. Research outcomes can help make the case.

I love change and exploring new ideas. I love data and evaluating outcomes. When I moved from India to Dublin, it moulded my career pathway. My drive in research was fuelled by an enthusiastic respiratory consultant who persuaded me to present my first conference paper to the Irish Thoracic Society in 2009. That was my beginning in research.

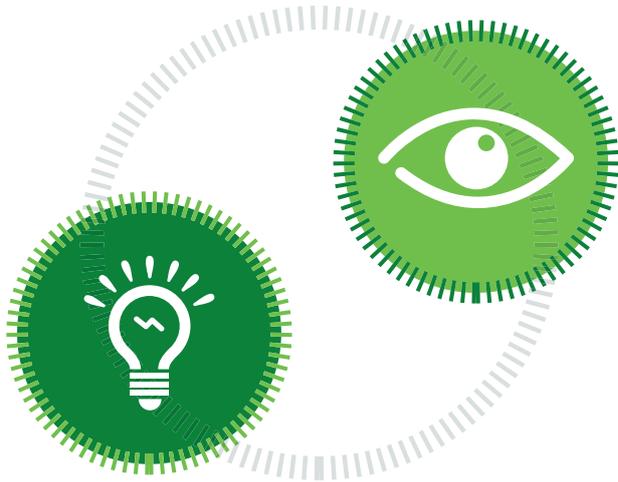
My biggest challenge as a clinician doing research was time management. I needed to juggle administration, clinics, staff management and research. On top of this, I wanted time with my family and a work-life balance. I am not alone; it is the status quo of most clinical staff out there. Neither is the value of research always clear to senior management. Most of my past research I ended up doing in my family time, sometimes at midnight while my kids slept. It is a hard battle.

Research is not everyone’s cup of tea, but I would like more allied health professionals (AHPs) to get involved in research training, evidence implementation and policy setting. This would pave the way for better knowledge generation, knowledge translation, strengthen research partnership and leadership.

To enable a research-active culture, we need NHS bodies to identify passionate staff and provide training and support; research should be part of mandatory continuing professional development (CPD) for AHPs; local universities and health boards should collaborate to showcase their research. Finally, I would encourage research-active staff to promote their career stories and be a mentor for their colleagues.

Shakila Devi Perumal

**Lecturer in physiotherapy
Cardiff University School of Healthcare Sciences**



‘It’s constantly stimulating and challenging. I can’t ever imagine myself being bored’

As a clinical academic, I have clinical duties, but I am also involved in research and teaching. Combining the two roles means we can really keep the patient at the heart of what we do, and that’s a real privilege. Researchers spend an awful lot of time writing and a lot of time is actually spent just publishing – writing grants, looking for the next money. It becomes a bit of a cat-and-mouse game sometimes. The other thing we do a lot is writing reports – reporting to funders, health boards, clinical trials and, of course, publishing papers. Whatever research you do, what’s really, really important is that you communicate your findings, and not just to the wider academic community, but to your patients and the public.

Historically, career pathways into research have been really poorly defined. Now we’re introducing academic pathways at foundation stage and during core medical training (CMT). Of course, there are specialist integrated training programmes like the Wales Clinical Academic Track (WCAT). But if you don’t want to commit to an integrated academic training track, then out-of-programme research is a really good option – things like clinical research fellowships, or you can do a higher degree and have that funded by one of the big charities. So if you did want to dip into research and have a few years out of clinical training to try that, then that is a really good option.

Now I am working less than full time, coming towards the end of my fully funded PhD. Working in academic medicine, I would say that the variety of the week is something that I absolutely love. No two weeks are the same. It’s constantly stimulating and challenging. I can’t ever imagine myself being bored. You also develop quite a unique skillset, the ability to analyse research, and evaluate, adapt and apply it to your own patient population. I think that gives you a really unique perspective as a clinician as well.

Dr Alexa Wonnacott

Clinical research fellow
Cardiff University School of Medicine

‘Research offers me the opportunity to make a difference to future patient care’

As an academic foundation year 1 doctor, I undertake both laboratory-based basic sciences research and clinical research. I’m currently working full time in clinical practice, with research activities continuing outside of my day-to-day role. I first became involved in research at medical school, very much by chance! I had met an academic clinician through some part-time employment and he encouraged me to give research a go. I’d never thought I’d be ‘research-minded’, but the more I did the more it grew on me. Research offers me the opportunity to make a difference to future patient care; at this early stage in my career it is very rewarding to be able to contribute new knowledge or perspectives to the body of evidence that guides the way we all treat our patients. Being actively involved in research brings together a team to collectively work for the good of patient care, and I think that can be an immensely positive experience.

I enjoy the variation in research and research practice. As a clinician with dedicated academic time, I engage with basic science research at the North Wales Clinical Research Centre, and with clinical research. Research offers a different set of challenges to clinical medicine; it affords more time and space to think problems through, and in busy clinical life that space can be hugely beneficial. It enables me to practise in a more evidence-based fashion.

Anyone wishing to give research a go should talk to their colleagues. Collaborative research, and particularly trainee-led collaborative research, has huge potential to change the way we conduct research, and there are lots of opportunities for clinicians to get involved. Many doctors are busy with clinical commitments and there is often limited time for local research projects. However, we have an amazing opportunity to build networks, share experiences and collaborate on projects. In the future, I’d like to see greater trainee-led collaboration, more dedicated time for clinicians to undertake research and more mixed-methods research to accompany quantitative studies.

Dr Sacha Moore

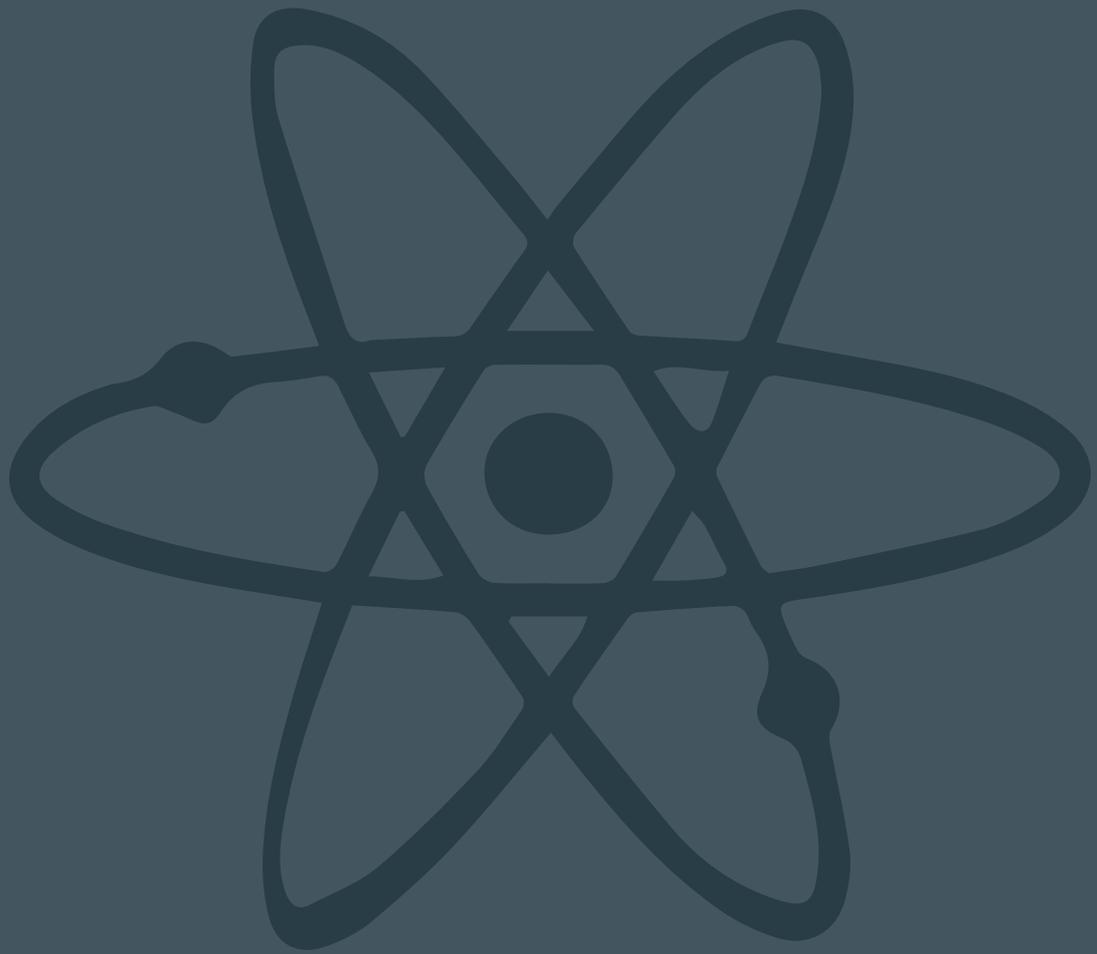
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