Where would we be without research?
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This has been another year of innovative, ground-breaking research.

Talented researchers and delivery teams across Wales have contributed to and spearheaded world-class research - from the continued efforts in helping combat COVID-19 to helping discover new treatments for people living with mental health conditions and rare diseases, as well as improving our understanding of global health issues such as antibiotic resistance.

I want to say Diolch o galon to the staff who helped make these studies happen but also to those people who have dedicated their time to help shape and participate in this research - it’s great to see so many people getting involved.

Through Health and Care Research Wales, Welsh Government invests and supports the studies which will have the most relevance to the people of Wales, and helping provide the evidence to ensure real impact and change and deliver the most effective treatments and care to patients. This is clearly highlighted by the recipients of this year’s grant and funding awards, all of which have clear public, practice and policy relevance.

The research conducted over the past year has been integral to key policies and national initiatives such as the ambitious vision to transform clinical research delivery across the UK, ‘Saving and improving lives: the future of UK clinical research delivery’. The One Wales approach, which is making study set-up and delivery faster, more efficient and more innovative is testament to this, as is the increasing efforts to make participation in research as easy as possible and empowering health and care staff to carry out research.

Our efforts and priorities continue to align with ‘A Healthier Wales’ strategy and our ‘Programme for Government’, with a key focus on women’s health and social care research for the coming year. I’m pleased to already see the increase in research in these areas evidenced by studies into postpartum psychosis and care homes.

I look forward to continuing to work with our research community in the future, bringing the benefits of research to all.

Eluned Morgan MS
Minister for Health and Social Services,
Welsh Government
Over the last year, the COVID-19 pandemic has continued to play a significant part in all our lives - and to be a huge focus for the health and care research effort in Wales. I'm proud to say we have supported 119 COVID-19 studies and that more than 60,000 people in Wales have taken part in COVID-19 research. Research has helped in so many ways to improve care for patients, and Wales COVID-19 Evidence Centre has been hard at work to provide rapid evidence syntheses to help Welsh Government and NHS and care organisations to use the research effectively in their decision making.

As we start to come out of the worst of the pandemic, we have worked hard to recover research activity across health and social care in Wales, supporting the NHS to restart research in areas where it had been paused. We have seen during the pandemic how our One Wales research model significantly improved the coordination of research delivery across the NHS and we should seek to work in partnership in future to ensure efficient and streamlined support for research.

With the impact of research now more visible than ever, new dedicated research centres and facilities have been developed in health boards across Wales including at Hywel Dda, Betsi Cadwaladr, Cwm Taf Morgannwg and Aneurin Bevan University Health Boards. These research centres and facilities provide patients with increased opportunities to participate in clinical trials which offer earlier access to the very latest treatments and therapies.

We have continued to fund projects with public, practice and policy relevance while supporting the development of individual researchers across Wales. Funding calls which ran between April 2021 and March 2022 resulted in Health and Care Research Wales funding 30 new awards amounting to £6.4million. Covering a wide range of health areas from mental health and cancer to genetics and genomics, our research centres continued to increase the amount of world class research in Wales addressing real-world needs and challenges.

The Welsh public are central to ensuring the relevance and quality of the research we fund and that’s why we aim to involve and engage them in everything we do. The past year has enabled us to capitalise on people’s increased understanding of the importance of health and care research, with the implementation of Welsh Government’s flagship public involvement and engagement ‘Discover your role’ action plan and the continuation of our ‘Where would we be without research?’ campaign.

There is still much to do. We will shortly publish our plans for the next three years, setting out how Health and Care Research Wales will work to achieve our purpose – which is to promote, support and provide collective oversight of health and social care research in Wales to ensure it is of the highest international scientific quality, is relevant to the needs and challenges of health and social care in Wales, and makes a difference to policy and practice in ways that improve the lives of patients, people and communities in Wales.
Where would we be without...

Our research centres

Covering a wide range of health areas from mental health, cancer and genetics, to children’s social care and population and public health, our research centres and units aim to increase world class research in Wales. They work with NHS and social care partners to ensure their research portfolios address real-world needs and challenges.
2021-22 saw our centres and units continuing to respond to the challenges of COVID-19, while also using learning from the many innovations developed during the pandemic to deliver non-COVID-19 studies. This year, their activities resulted in 175 new research awards totalling £36.8 million. The following examples illustrate the practical importance of the research taking place to health and social care.

Our National Centre for Mental Health is leading the way in the UK with its research into maternal mental health. This includes postnatal depression, which affects around 1 in 10 women, and postpartum psychosis, which affects around 1 in 1000 women in the UK. A study on postpartum psychosis and its association with bipolar disorder in the UK, has highlighted the differences between postpartum psychosis and bipolar disorder for the first time and is the largest genetic study of postpartum psychosis to date. As postpartum psychosis is not recognised by official diagnostic systems, this research is vital in raising awareness and establishing the condition within the bipolar disorder spectrum. This research recently featured on our ‘Where would you be without research?’ podcast.

Another longstanding partner, Wales Gene Park is supporting vital research into rare diseases. Research being undertaken by the Inherited Tumour Syndromes Research Group as part of Wales Gene Park, is leading to a better understanding of the underlying genetic causes of rare diseases such as tuberous sclerosis (TS), causing tumours to develop in different parts of the body, including the brain, kidneys, heart and lungs. A study looking at genes and the kidney in TS aims to find out how the kidneys of people with TS are affected as they grow older and should inform the use of new treatments and medication. Read Trystan’s story to find out how research is benefitting people living with TS.

The widespread use of antibiotics in primary care contributes to the development of antimicrobial resistance, widely described as one of the most serious threats of our times. PRIME Centre Wales is making remarkable advances in improving our understanding of the benefits and harms of different antibiotics. One study is looking at antibiotic treatment and the risk of major bleeding in people who take medication to help prevent blood clots (anticoagulants). Several antibiotics are thought to interact with anticoagulants and increase the chance of a major bleed. The study is helping to identify which antibiotics are safe and help reduce the risk of bleeding. Read about the Rhondda Valley GP making a difference with this research.

Our centres and units are also impacting on social care in Wales. The Centre for Trials Research at Cardiff University led a ground-breaking study to assess the health of 20,000 domiciliary care staff in Wales. The first study to combine health record and professional registration data, the results will inform safer working practices and additional support for staff. Our Centre for Ageing and Dementia Research also made headway in social care research with its work on dementia and the Welsh language. Research in care homes has highlighted the importance of a shared language to ensure residents feel at home and staff can provide the best care to meet their needs.

The Secure Anonymised Information Linkage (SAIL) Databank has been instrumental in assisting the UK Government and the NHS in the effort to tackle COVID-19. Working with colleagues from within the Population Data Science group and across Wales including Health Data Research UK, Administrative Data Research Wales, Adolescent Mental Health Data Platform, The Health Data Research Hub for Respiratory Health, Welsh Government, Public Health Wales and Digital Health and Care Wales; a One Wales approach was adopted to identify data gaps to help policymakers understand and plan around COVID-19. Read about how the One Wales approach worked in practice and the wider work of SAIL Databank.

Find out more about who our funded research community are and the life-changing work they do.
Where would we be without...

Our research grants and awards

Health and Care Research Wales grant schemes fund projects with public, practice and policy relevance while supporting the development of researchers across Wales. Funding calls which ran between April 2021 and March 2022 resulted in Health and Care Research Wales funding 30 new awards amounting to £6.4million.

This included Social Care Research Grants, Research for Patient and Public Benefit (RfPPB) Wales projects, Health Research Fellowships, Health PhD Studentships, along with NHS Research Time Awards. All awards were active on 1 October 2022.

We were pleased to fund one Health and Care Research Wales/National Institute for Health and Care Research Advanced Fellowship, awarded to Joanna Martin from Cardiff University.
Building research capacity in Wales

The Research Capacity Building Collaboration (RCBC) Wales aims to increase research capacity and capability in nursing, midwifery, pharmacy and allied health professions, and to contribute to the development of clinical academic roles. It offers a range of awards, from First into Research fellowships, to PhDs, through to support for those wishing to undertake postdoctoral studies.

RCBC Wales comprises six university nursing and allied health departments/schools in Wales - the universities of South Wales, Swansea, Cardiff, Cardiff Metropolitan, Wrexham Glyndwr and Bangor - and engages with the NHS, industry, charities and policy makers.

Over the last year, fellows have started projects covering a variety of topics including an interpretative phenomenological analysis of the importance of diagnostic labelling in child and adolescent mental health and research into job role design and workforce retention of pharmacists.

For more information and details of funding calls, please visit the RCBC Wales website and on Twitter @RCBCWales.

A complete listing of our funded projects and further details of our 2022 funding recipients can be found on our website.
### Our research centres in numbers

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
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<tr>
<td>Direct funding awarded</td>
<td>£9.7m</td>
</tr>
<tr>
<td>Tissue samples issued</td>
<td>9091</td>
</tr>
<tr>
<td>Value of grants won*</td>
<td>£36.8m</td>
</tr>
<tr>
<td>Jobs funded</td>
<td>205</td>
</tr>
<tr>
<td>Successful grants awarded*</td>
<td>175</td>
</tr>
<tr>
<td>Jobs created</td>
<td>206</td>
</tr>
<tr>
<td>Research publications</td>
<td>896</td>
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*Grants won by lead applicants from the Centres

### Our funding schemes

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<th>Total</th>
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<tr>
<td>Health Research Fellowships</td>
<td>£1,388,535</td>
</tr>
<tr>
<td>Social Care Research Grants</td>
<td>£2,073,881</td>
</tr>
<tr>
<td>Research for Patient and Public Benefit (RfPPB) Wales scheme</td>
<td>£1,114,795</td>
</tr>
<tr>
<td>NHS Research Time Awards</td>
<td>£356,789</td>
</tr>
<tr>
<td>Health PhD Studentships</td>
<td>£527,735</td>
</tr>
<tr>
<td>Health and Care Research Wales / NIHR Advanced Fellowship</td>
<td>£905,023</td>
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Research is a core function of NHS Wales and is essential for improved treatment and care for the people of Wales and internationally. Health and Care Research Wales Support and Delivery Service provides support throughout the research pathway. The service, which includes local research and development departments in NHS health boards and trusts across Wales, ensures that patients and the public have opportunities to take part in research and supports a culture of research in health and social care services which is beneficial to patient outcomes.
Developing our One Wales approach

During the COVID-19 pandemic, we set up and delivered 119 COVID-19 studies which enabled around 60,000 people in Wales to take part in COVID-19 research. This included seven vaccine trials which were successfully set up and delivered to meet sponsor requirements in a rapidly changing context of vaccine discovery. Ground-breaking COVID-19 treatment studies were also delivered including RECOVERY and REMAP-CAP - which helped determine which drugs are effective, and importantly, which drugs are not effective for patients hospitalised with COVID-19 - and PRINCIPLE and PANORAMIC - which helped answer questions about COVID-19 treatments for patients outside of hospital.

Managing the recovery of research

During the COVID-19 pandemic, almost 80% of research was suspended alongside those services where we were conducting that research. In the last year we have worked hard to recover research activity across health and social care in Wales, supporting the NHS to restart research in areas where it had been paused. This is a challenging task as the pandemic continues to affect the capacity of health and social care services with staff sickness and the backlogs in clinical care putting pressure on space, support services and clinical time. Moreover, some studies that were designed before COVID-19 are not compatible with new care pathways. Nevertheless, we have supported over 60% of suspended studies to restart, as well as continuing to enter participants into COVID-19 studies and provide follow-up for COVID-19 research.
Supporting our research delivery teams

In order to support research as part of everyone’s business in the NHS, we directly fund nearly 550 staff across Wales to support research delivery including research nurses, midwives and allied healthcare professionals, clinical research officers, study coordinators, administrators and health and care support workers. Many of these staff were redeployed during the pandemic but are now returning to support the recovery of research delivery in Wales.

Our Research Officers are being offered the opportunity to join the Academy of Healthcare Science/NIHR accredited register and we have been developing a single, consistent entry pathway for Wales and a competency framework to support this.

We have promoted and engaged widely in the NIHR Associate Principal Investigators scheme which is a six month in-work training opportunity, providing practical experience for healthcare professionals starting their research career.

We support 31 Clinical Specialty Leads to facilitate engagement with their colleagues across Wales and represent Wales as key clinical leaders at a UK level for research delivery.

Our high-quality training programme has continued to offer a range of research training including Good Clinical Practice, valid informed consent and communications skills in research.

Growing our research facilities

The past year has also seen the development of new dedicated research centres and facilities in health boards across Wales including at Hywel Dda, Betsi Cadwaladr, Cwm Taf Morgannwg and Aneurin Bevan University Health Boards.

These research centres and facilities provide patients with increased opportunities to participate in clinical trials which offer earlier access to the very latest treatments and therapies. They include bespoke clinical and consulting rooms to treat and monitor patients and multifunctional laboratory spaces with state-of-the-art facilities. The new centres and facilities are a welcome addition to those already well-established in Cardiff and Vale and Swansea Bay University Health Boards and continue to make Wales a more attractive place to conduct life-changing research. Read about the new Glangwili Hospital Clinical Research Centre.

Find out more about Welsh NHS health boards and trusts in research.
Support & delivery 2021/22

24,921
Participants recruited into high-quality research studies

592
Active non-commercial high-quality research studies

205
Active commercially sponsored studies

6.5
per 1,000 population recruited per annum (5 year average)
Where would we be without...

Public engagement and involvement

The Welsh public are central to ensuring the relevance and quality of the research we fund and that’s why we aim to engage and involve them in everything we do. The past year has enabled us to capitalise on people’s increased understanding about the importance of health and care research and provide a total of 70 opportunities for the public to be involved in the whole research process from design to delivery and dissemination.
Implementing our public engagement strategy

Another key output from Discover your role was our public engagement strategy 2021-2024, which sets out a three-year plan on how we will engage more people across Wales. As part of the strategy, we have established a stakeholder advisory group, made up of community leads, policy makers, practitioners and researchers, who have expertise in working with under-served communities in Wales. They are helping us tailor our messages and identify approaches to engaging with under-served people.

Also key to the strategy, February 2022 saw the launch of our public engagement campaign 'Where would we be without research?'. The campaign aims to tell the story of how research changes lives and the vital role the people of Wales play in the discovery of better treatment, care and even cures. To date it has included research stories, the first Health and Care Research Wales podcast series and events. To find out more visit our campaign webpage.

Our public engagement activities are aligned to UK-wide public engagement initiatives such as Be Part of Research, which help the public understand what research is, what it might mean to take part and the difference it can make to improving care for everyone.

Discover your role

During the past year, we have introduced Discover your role, our action plan for increasing public engagement and involvement in research by addressing barriers and widening engagement with more diverse communities. Our Public Engagement and Involvement Forum was launched in 2021, with three meetings held in the past year, discussing public involvement in research priorities, funding, decision making, equality, diversity and inclusion. Find out more about the Forum’s activities.

Shared commitment

The past year has also seen us working together with the Health Research Authority (HRA), the National Institute for Health and Care Research (NIHR) and other UK organisations to continue to improve public involvement standards in health and social care research. Health and Care Research Wales is one of 13 UK-wide organisations to sign the HRA shared commitment to public involvement. This is a joint commitment to improve the quality of public involvement across the sector, making sure meaningful public involvement is consistently used in all research.

Five nations public involvement

Health and Care Research Wales plays an integral part of the five nations public involvement action group. This aims to advance high-quality public involvement in health and care research by developing and promoting common, UK-wide or UK and Ireland positions on particular aspects, such as payment for public contributors and monitoring the adoption the UK national standards for public involvement, and taking collective action.

A weekly round-up of our public involvement opportunities and events in Wales are included in our weekly Today’s Research bulletin.

Work in research? Support, guidance and training is also available on our website.
Looking ahead...

The future for Health and Care Research Wales

Over the coming year, Health and Care Research Wales will build on the legacy and learning from the COVID-19 pandemic. We will shortly be setting out our plans for the next three years to improve all health and care research to drive improvements in health and social care services and to lay the foundations for better outcomes for patients, people and communities across Wales.
One key task is to work with our UK partners and with stakeholders in Wales to reset the NHS research portfolio, and to address the challenges of supporting and resourcing the high number of research studies underway in the NHS, many of which were paused during the pandemic. The Welsh Government has provided £1.7 million to support additional capacity for the recovery of non-COVID-19 research and our aim is for 80% of all open studies on our research directory to be delivering to time and target by June 2023. We will also be working with our partners to deliver the next phase of the UK Clinical Research Strategy which will involve a set of reforms to improve effectiveness and efficiency in research delivery so that innovative research can be carried out more quickly, helping patients access cutting-edge treatments sooner.

We recognise the research workforce in Wales is critical to our success in increasing research capacity. We aim to ensure all health and social care researchers are offered rewarding and challenging careers, so we attract the most talented people. In February 2022, we published a vision for research career pathways, outlining recommendations to improve support and encourage more health and social care professionals to embark on research careers. In autumn 2022 we will launch a new Health and Care Research Wales Faculty, which will include increased investment in our personal award schemes and more support and mentorship to develop the next generation of principal and chief investigators in the NHS and in our higher education institutions.

We invest in research through both our core funding for centres and units and through our research commissioning programmes and calls some of which are run in partnership with other UK funders. In both cases we plan to review how well current systems work to build and sustain research excellence in Wales, and to deliver research that really makes a difference. Building on the experience of the Wales COVID-19 Evidence Centre during the pandemic, we are moving to broaden the scope of the Evidence Centre to support decision makers across health and social care and the Programme for Government priorities with good evidence synthesis and capacity to undertake rapid evaluation research.

Our ambition is for more people-centred research; making it easier for patients, service users and members of the public to take part in research and be involved in its design. To achieve this, we aim to deliver research around the needs of participants, including in community, primary care and virtual settings. We will continue to implement our Discover your role plan. We will also continue to work with UK partners to ensure patient and public involvement in research in a variety of ways including through regulation, ethics, payment for public contributors and development of new public engagement strategies.

The pandemic transformed the way digital systems and data were used in research, and we want to sustain that progress - it is an area where Wales has pioneered safe and secure data linkage and use. We will now go further in utilising innovative data-driven methods and digital tools to transform the way we design, manage and deliver health and social care research across Wales. For example, partnering with SAIL Databank and the NHS Wales National Data Resource, we will develop a digital recruitment programme, using data to drive research delivery. An expert working group has been established to guide the ‘data for research’ programme.

This is a time of rapid and fundamental change in the health and care research landscape in the UK, with developments like increased funding and ambition at a UK level, increased investments in the life sciences, a new commitment to seeing funding taking account of place and geography and moving to. This means there are both opportunities to improve research and innovation in Wales and risks that the Welsh research community and Welsh NHS and social care system do not benefit as they should from new investments in health and care research and from the advances in care and treatment they produce. We look forward to the challenges and opportunities ahead.