

## Impact Report 2024-25



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#### 1. Who are we?

We are the region's academic health science partnership, a strategic alliance of NHS organisations, universities and Health Innovation Wessex, working together to harness the power of research and innovation to advance health and care.

Supported by a core team, the work of Wessex Health Partners (WHP) is driven by system leaders, researchers, clinicians and public partners across our member organisations.

We bring these experts together, fostering connections and networks to accelerate improvements – from finding new ways to diagnose disease, right through to innovative treatments and how we deliver health and care services.

We are helping the region as a whole respond with energy and focus to the government's key strategic shifts for healthcare:

- Sickness to prevention
- Hospital to community
- Analogue to digital









## 2. Why have we come together as WHP?

The Wessex region has a thriving research and innovation ecosystem, built on long-standing relationships. Recognising that through combining our excellence we are better able to accelerate change, our members founded Wessex Health Partners.

Working collaboratively as Wessex Health Partners, we are better able to:

- Improve the region's collective ability to tackle the greatest challenges facing the Wessex health and care system and wider society
- Generate greater collaborative and interdisciplinary research
- Speed the development and adoption of innovation at scale

Together, we are delivering the Government's missions to:

- Build an NHS fit for the future
- Kickstart economic growth

Our work is both important and urgent.



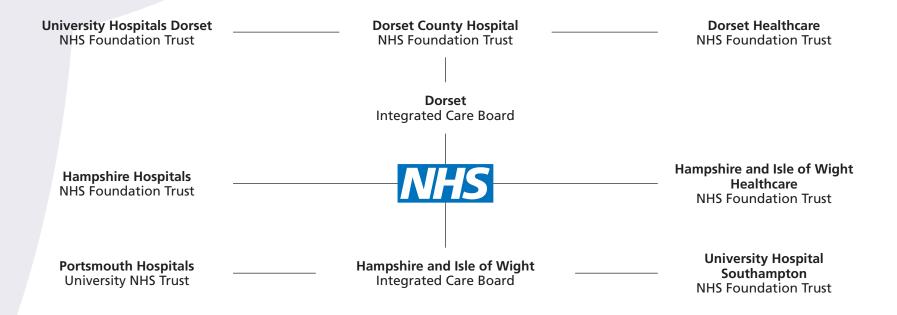
## Combined excellence accelerated impact

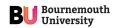
### Four Universities

### Nine NHS organisations

### Leading research infrastucture

### Health Innovation Wessex















## 3. What have we achieved through working together in 2024/25?

- Raised the profile of Wessex as an excellent centre for Life Sciences
- Helped our region's two Integrated Care Boards (ICBs) harness the power of research and innovation (R&I)
- Helped secure major pan-Wessex NIHR and NHS England Awards:
  - NIHR Commercial Research Delivery Centre Wessex
  - NIHR Maternal Disparities
     Consortium
  - NHSE funded Wessex SDE key milestones delivered

- Delivered 12 pan-Wessex WHP Academic Theme grant development workshops driving new collaborations and funding applications focused on addressing regional priorities for population health and care
- Launched NIHR Wessex Experimental Medicine Network (WEMN) - now with 22 collaborative projects on portfolio
- Ran the WHP / NIHR WEMN Small Grants Scheme to drive new pan-Wessex collaborations building regional R&I capacity and capability
- Established pan-Wessex Research and Innovation networks
- Launched Wessex Research and Innovation in Women and Girls report leading to formation of pan-Wessex working group
- Supported 32 pan-Wessex collaborative funding applications submissions resulting in 11 successful bids to large national bodies



## 4. How are we working together to deliver impact?

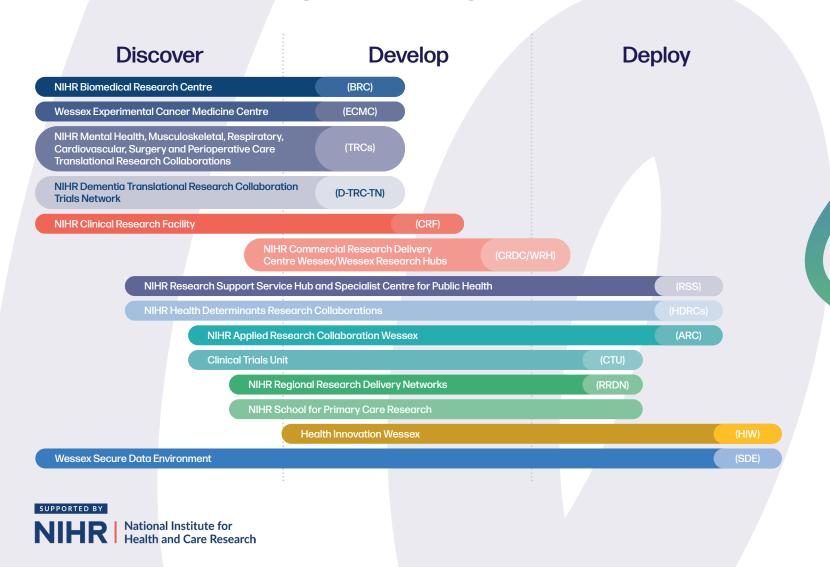
We are building an inclusive and sharing culture in line with our values of collaborative excellence, ambitious innovation, integrity and trust, through:

- Providing platforms for different sectors and groups to build relationships and work together
- Focusing on the health and care needs of the Wessex population and addressing inequalities
- Supporting collaborations to generate evidence on new ways to prevent, diagnose and treat ill health including how health and care services are provided
- Developing the infrastructure to support sustainable delivery of activities
- Funding collaborative research and innovation with small grants

- Convening regional leaders and public partners to identify and enact strategic priorities for healthcare research and innovation
- Thought leadership to influence local, regional and national decision making on the most important issues
- Articulating and amplifying health and care research and innovation within Wessex to promote the region as a leading centre for life sciences



## 5. Developing our regional infrastructure



#### 5. Developing our regional infrastructure

## The Research and Innovation infrastructure and expertise within the region is a major asset offering significant opportunity to:

- Expand research and innovation capacity and capability to benefit more partners
- Promote collaboration and greater partnership working
- Focus research and innovation on meeting the local population health needs and address health inequalities
- Collaborate with industry partners

- Connect discovery and development researchers with colleagues with expertise in deployment to:
  - Better understand the key factors that have a positive impact on adoption
  - Generate a pipeline of innovation suitable for deployment within Wessex and nationally
  - Accelerate deployment of proven innovations and generate impact
- Increase funding secured through grants and other funding sources

Our role is to ensure the benefits and expertise contained within this infrastructure is spread across the region. We also help ensure robust governance within some parts of this infrastructure and promote wider collaboration.







#### **NIHR WEMN**





Experimental medicine is a broadly used term, but we take it to mean:

- Studies undertaken in human participants, or using human derived data or human tissues
- Studies which aim to identify mechanisms or pathophysiology of disease
- Studies which demonstrate proof-ofconcept or the validity of new designs and approaches
- First-in-human or early phase clinical trials

Through the NIHR Wessex
Experimental Medicine Network
(WEMN), we are widening
accessibility to NIHR resource and
expertise in experimental medicine
to all partners, providing funding and
support to individuals and teams
to develop their own experimental
medicine research programmes.

We are doing this by:

- A. WHP/NIHR WEMN Small Grants Scheme (please see page 35)
- B. Support for regional engagement meetings





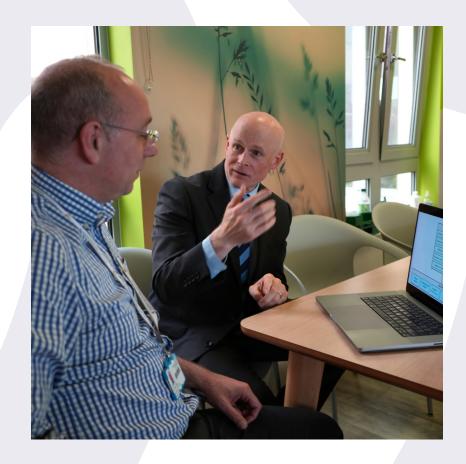
## Case Study: Road traffic safety initiatives for injury prevention



Dr Philip Hyde Consultant paediatric intensivist, University Hospital Southampton

Road traffic collisions cause 30,000 deaths and serious injuries annually, estimated to cost the economy around £42bn each year. For the first time, road safety research is linking pre-collision data from police incident records, air ambulance services and coroners' reports with post-collision hospital data.

NIHR WEMN and Wessex Health Partners have seed funded two linked projects. The first is led by Phil Hyde, consultant paediatric intensivist at Southampton General Hospital, and will source pre-collision police data and link this to health, patient outcome and other data sets, to empower change in public health policy to reduce road traffic injuries and deaths. This project has since expanded to other national data sets and attracted further funding from the Department of Transport and Road Safety Trust.



#### 5. Developing our regional infrastructure



lan Mew Consultant in anaesthetics & critical care medicine, Dorset County Hospital

The second, linked, project focuses on developing an evaluation framework to assess the effectiveness of an existing motorcycle safety initiative in Dorset. This will provide the evidence needed to support further expansion of this injury prevention programme nationally. The novel safety intervention is the result of collaboration between the charity Docbike, Dorset County Hospital, South Western Ambulance Service, Dorset and Somerset Air Ambulance, Dorset Police, Dorset Roadsafe, Dorset and Wiltshire Fire Service, Bournemouth University, Wessex Trauma Network and the Department for Transport.

The project is led by Ian Mew, a Consultant in anaesthetics & critical care medicine at Dorset County Hospital.

"DocBike is a novel experiment, putting air ambulance doctors and paramedics onto an emergency motorbike to engage with 'at-risk' motorcyclists who are less likely to talk to the police or listen to traditional road safety initiatives. We need research and evidence to prove how the DocBike charity is helping to inform and educate the motorcycling community. DocBike is proud to be working with Wessex Health Partners to develop an evaluation tool to demonstrate the benefit of its interventions."



## Support for regional engagement meetings

One of the aims of NIHR WEMN is to extend the benefits of NIHR Southampton Biomedical Research Centre (BRC) across the region.

NIHR WEMN enabled the NIHR Southampton BRC team to come together with Health Sciences University to explore new research possibilities and develop joint projects.



Dr Julie Northam Head of Research, Health Sciences University (HSU)

"Collaboration is integral to our mission and serves as a cornerstone of our strategy to expand research capacity. WHP spotted a potential affinity between the two organisations, and without the involvement of the NIHR WEMN, a key component of the NIHR Southampton Biomedical Research Centre, delivered in partnership with WHP, this event wouldn't have happened."







## NIHR WEMN played a key role in planning and delivering the Bournemouth University - NHS 'Working in Partnership' Event.

Several presentations were heard from researchers funded by the WHP/NIHR WEMN small grants scheme call, and many people spoke of how valuable it was to be able to come together in this way.

#### Feedback from the day:

- 85% said the event gave them the opportunities to network
- Attendees rated their experience of the event 4.4/5
- 90% said they were likely to recommend the event



Professor Kyla Thomas Network Director, South West Central Regional Research Delivery Network

"There are several things that we're trying to tackle together, and we can't tackle on our own because no one organisation or one individual has the answer. We have to work in collaboration to find solutions to some of the really complex health problems that we're facing today.



Professor Anand Pandyan Executive Dean, Faculty of Health and Social Sciences Bournemouth University

"This event really showed the benefits of working together - the benefits of us pooling our resources together in order to grow capacity for research."





## Wessex Research Hubs / NIHR Wessex Commercial Research Delivery Centre (CRDC)

## WESSEX RESEARCH HUBS

Wessex Research Hubs is a collaborative network of clinical trial facilities delivering research at scale and pace.

#### The network consists of:

- Bournemouth Research Hub based in a major general hospital, this hub recruits from one of the most elderly populations along the south coast, offering a unique demographic
- Portsmouth Research Hub based in the heart of the city, this hub offer later phase trials and is embedded in city life
- Southampton Research Hub based in the Shirley Health Centre in a diverse part of Southampton, this hub caters for trials from phase one onwards
- Weymouth Research Hub based in an NHS vaccination centre near the coast, this hub is finding new ways to engage with the population



## Case study: Nova 301 Trial

In 2024, Wessex Research Hubs was the lead site for the delivery of a ground-breaking norovirus trial. There is currently no licensed vaccine for norovirus in the world.

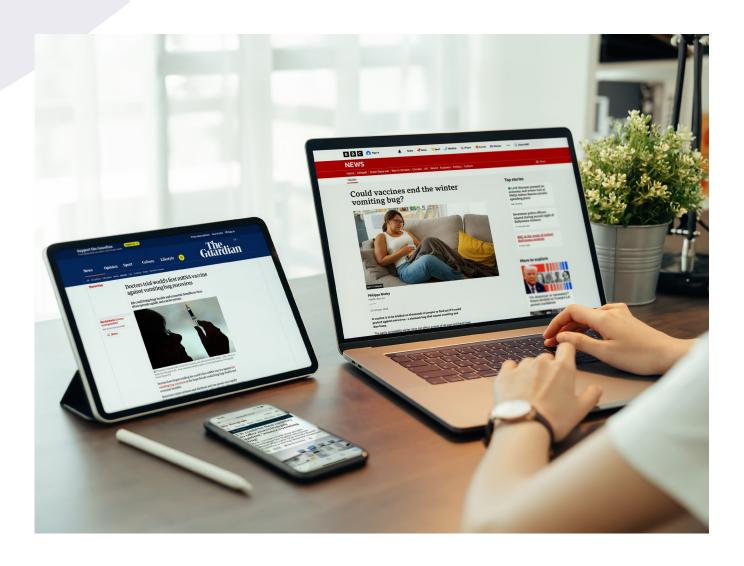
Sponsored by Moderna, this investigational vaccine has potential to be hugely beneficial to both individuals and the healthcare system as a whole. Nororvirus closes whole hospital wards, care homes, schools and many other public places. It can also be a serious illness for elderly people. The trial attracted extensive national and international press interest. In total, 238 participants were recruited by Wessex Research Hubs.





The Telegraph





## **Becoming a CRDC**



This year, Wessex Research Hubs was successful in securing new funding over a 7-year period as an NIHR Commercial Research Delivery Centre (CRDC). WHP helped Wessex Research Hubs secure this £4.7m investment for this trail-blazing regional collaboration between 9 NHS Trusts and GP practices.

The aim is to partner with industry to hugely widen public access to cutting edge commercial research. Our local CRDC joins a new network of centres, part of a strategic national response to the need to boost competitive clinical trials provision in the UK, which has been dropping behind other countries.

#### NIHR Wessex CRDC will:

- Build capacity in commercial research
- Provide dedicated staff and facilities to conduct commercial research
- Provide access to a network of commercially active sites with goldstandard set-up times and performance
- Increase research inclusion







#### 5. Developing our regional infrastructure



Professor Lucy Chappell
Chief Executive Officer,
NIHR
Chief Scientific Adviser,
Department of Health and Social Care (DHSC)

"Clinical trials help improve lives. Boosting our capacity to deliver commercial clinical research through these new Commercial Research Delivery Centres (CRDCs) will support recruitment across all communities and bring innovative treatments to patients. The effects of these centres will be felt right across the four nations, bringing investment into the UK's life sciences sector."



Dr Patrick Moore Co-Director, NIHR Wessex CRDC

"WHP played a vital role in enabling the success of the Wessex Research Hubs and latterly the NIHR Wessex CRDC. Their strategic oversight, collaborative ethos and strong regional partnerships have provided a firm foundation for the NIHR Wessex CRDC."



Professor Saul Faust Co-director, NIHR Wessex CRDC

"WHP has been essential to ensure the NIHR Wessex CRDC partners have complete confidence in the NIHR Wessex CRDC's governance and oversight. WHP's support ensures we remain accountable and aligned with regional priorities across Wessex. This has really helped to collectively strengthen our shared Wessex infrastructure so that we can move at scale and pace to conduct commercial clinical trials."

#### **Wessex Secure Data Environment**



The Wessex Secure Data
Environment (SDE), part of a
national programme, is a secure
NHS cloud-computing platform
designed to enable large amounts
of de-identified patient data to be
safely stored, linked, and made
accessible to researchers to support
the development of life-saving
treatments and improve services.

WHP is helping to establish the Wessex SDE as a powerful piece of new research infrastructure for the region. We played a central role in securing data sharing agreements for the Wessex SDE with each of our partner NHS organisations. We also provided regional communications support to its large scale "have your say" engagement campaign – crucial for ensuring public trust in this new approach to patient data.

The Wessex SDE is already supporting the delivery of nationally significant projects and data registries, including for pre-hospital emergency care, dementia and lung health – with over 80 projects now in its research pipeline.

#### Key successes include:

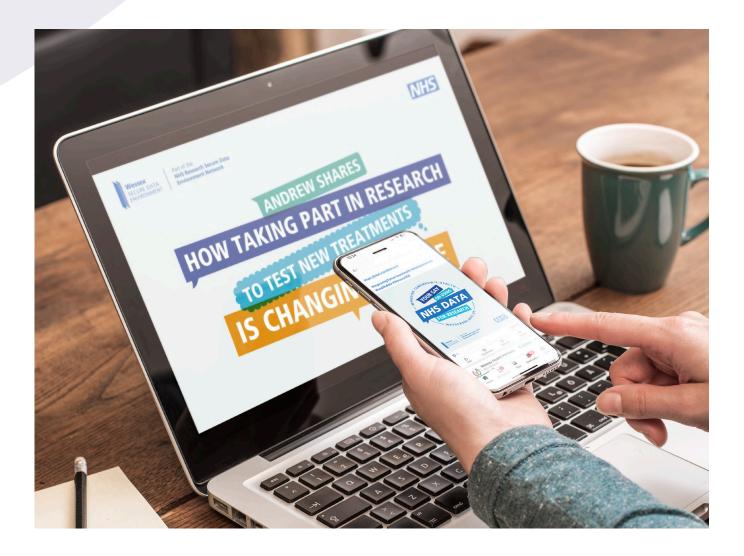
- Delivery of a 'minimum viable product' (MVP) production infrastructure, including key existing datasets
- 10 'exemplar' projects contracted and delivered or in process
- 40 more projects in the pipeline
- Data sharing agreements with all data controller organisations, and completion of a data catalogue exercise
- Launch of the Wessex SDE website and ongoing public engagement including a Data Access Committee

#### 5. Developing our regional infrastructure



Christine McGrath Managing Director, Wessex Health Partners

"It's crucial to meet the expectations of the public in providing our researchers with access to the data they need to find solutions. The Wessex SDE will help our region play a major role in the life sciences and improve healthcare for local people - delivering on our vision for Wessex."



## Case Study: Bladder Cancer, a new era for research using the Wessex SDE

Bladder cancer affects approximately 10,000 patients every year in the UK. Clinical outcomes remain challenging and improvements have been slow. However, improved understanding of the biology of the disease and new experimental treatment options have renewed optimism in recent years.

University Hospital Southampton (UHS) is working with the Wessex SDE to combine diverse and complex data held within UHS computer systems on the diagnosis and treatment of bladder cancer patients. They will be able to analyse 'real world' approaches to patient care taken across multidisciplinary teams. This will reveal what the current 'gold standard' treatment looks like today, and ensure this is delivered to all patients – whilst also providing insights to drive further improvements in diagnostic pathways and care.

#### In this example, the Wessex SDE will:

- Bring together complex, multifactorial hospital data in an integrated way
- Reduce the amount of time-consuming analysis across multiple, diverse systems
- Enable a new degree and depth of research not previously possible
- Benchmark adherence to gold standard treatment options
- Make rapid changes to patient diagnostic pathways and care options
- Improve outcomes and quality of life



Professor Christopher Kipps Senior Responsible Officer, Wessex SDF

"Wessex Health Partners has played a critical role in bringing NHS organisations together across the region to make the Wessex SDE a reality. Their support and collaborative approach have been essential in aligning all NHS partners around a shared vision for the SDE and unlocking the full power of NHS patient data in the region. This partnership-driven approach has strengthened relationships and laid the foundation for transformative research that is already bringing real benefits to patients across Wessex."

# 6. Driving change in our Integrated Care Systems to maximise benefits of research and innovation

Through working together, we are helping our integrated care systems develop as learning health systems, informed by the most up-to-date evidence and knowledge.

Anyone applying for our small grants scheme must show how their project is aimed at addressing the most pressing health concerns of our region. The programmes emerging from our Academic Themes will also be aligned to these priorities.





## Case Study: Women and Girls Research and Innovation

In 24/25 we have focused on working with our Integrated Care Boards (ICBs) to improve the health of women and girls. We have brought researchers together with clinicians and service providers across the region to help accelerate improvements. In May '25 we held a special event to cement these relationships, and explore the potential for a new women and girls' health network.

Our report, requested by the two ICBs, informed their programmes for improving and women and girl's heath.



#### 6. Driving change in our Integrated Care Systems to maximise benefits of research and innovation



**Dr Paul Johnson**Chief Medical Officer,
NHS Dorset

"WHP's report, 'Research in the Wessex region in relation to women and girls' health and care needs', helped us understand where and how we should be asking more questions and delving further, and where the questions we already had were being answered through ongoing research. Vitally, it meant we were able to tailor our Dorset Women's Health programme to ensure we focused on what was really important for women and girls, and what would result in the most positive impact for them."



Helen Crook Programme Manager, NHS Dorset

"WHP helped us join forces across the region and connect with clinicians, stakeholders and women themselves. Our work together has enabled us to effectively and efficiently link research with our system-wide healthcare staff, to translate this into practice in real-world situations and continually make changes which impact women and girls in a meaningful way."



Fran White
Associate Director of Policy,
Innovation and Partnerships,
NHS Hampshire and Isle of Wight

"Through the initial report WHP produced we were able to understand where our strengths were and where we may want to develop more work. We have seen direct action as a result of this work. For example we were successful in the NIHR maternity disparities work - taking forward an important area of research, alongside a key Integrated Care System priority. We've also been able to connect lead researchers with those looking to develop their portfolio to apply for grants and funding. Without the work of WHP these connections and networks would not have developed."

### Case Study: Women and Girls' Health event

Funded by the WHP Small Grants Scheme and led by an Advisory Group, the "Wessex Women and Girls Research and Innovation for healthier lives event" brought together more than 90 delegates to hear about work currently underway to address inequalities in women's health, and what more can be done.

Following this, work is underway to further explore the potential to develop a Wessex wide Women and Girls R&I network, working together to further research and innovation in the region.

#### Highlights

"Learning about the research and innovation that is happening in our region and ways we can help advance it"

"Networking with others who are passionate about research and improving health and wellbeing for women and girls"

#### **Takeaways**

"A realisation we shouldn't be working in silos and should create more networks for collaborative working and capacity building across region."



Maryam Melekian Midwife and post graduate researcher, Bournemouth University:

"It was inspiring to be part of such an impactful event and to see the importance of advancing women's health through collaboration and innovation – an area that has historically been neglected in research."

#### 6. Driving change in our Integrated Care Systems to maximise benefits of research and innovation



Hannah Byrne Public Health Principal, Portsmouth City Council

"It was a fantastic day that sparked thoughts and connections between people with great research and passion for improving health outcomes for women and girls. The evidence and innovation is motivational, we are lucky in Wessex to have so many great organisations and individuals."













### Case Study: The Big Conversation

Every year we bring key clinical leaders and public partners together with researchers and academics to address our most pressing health challenges.

This year we focused on community and primary care, branding the event, "The Big Conversation" to emphasise the value in addressing big issues, and coming together to network and learn. Our Big Conversation 2025 showed us the power of combining forces to best respond to the government's three big shifts in healthcare.

### Event feedback was overwhelmingly positive

"A great forum to meet new people across a wide range of organisations."

"Welcoming and engaging event with lots of opportunity to network and catch up with people."

"Great to have so many different people in the room. The presentations stimulated great conversations in the break."

"It was a great opportunity to learn more about what is going on across the region, and who to speak with about shared interests and potential to engage in ongoing programs."







#### 6. Driving change in our Integrated Care Systems to maximise benefits of research and innovation





Anna Badley and Jennifer Malpass Co-Lab

"It was so good to connect with community people and partners and discuss all things community research. There is so much brilliant work already happening - connecting researchers and making this work visible is a top priority."



Eiroluwa Ajibade Digital Specialist Practitioner, University Hospitals Dorset

"I am so grateful for a day filled with thoughtprovoking conversations and meaningful connections. It was truly time well spend listening to inspiring speakers and engaging wtih brilliant leaders."



Sarah Chessell Dorset Innovation Hub Lead

"This was a valuable day spent networking with colleagues with great presentations, opportunities to develop programmes and raise awareness of the amazing work already being done."

### 7. Fostering pan-Wessex collaborative research

Cumulative

(to March 2025)

78

59 (plus 1EOI)

18

31%

10 (plus 1EOI)

2024-25

48

32 (plus 1EOI)

N/A

(plus 1EOI)

£33,800,230

1. Collaborative funding application support

Number of bids supported

Number of bids submitted

Number of successful bids

% of successful bids

Number of bids pending outcome

**Total funding awarded** 

Return on investment

#### 7. Fostering pan-Wessex collaborative research

We want to increase the number of successful pan-Wessex collaborative funding applications to large external bodies, and consequently the amount of inward investment coming into the region. During 2023/24, the WHP core team provided support to 36 funding applications involving WHP founding partners.

This support has continued during 2024/25, with 48 collaborative funding applications supported during the year – a total of 78 bids since the inception of WHP, with 59 being submitted (plus one expression of interest).

The total income from the 18 successful collaborative bids supported by the WHP core team during the WHP first term is £33.8M – this is new money into the region.



### Case Study: Maternity Disparities Consortium

University of Southampton and NHS Hampshire and Isle of Wight ICB jointly with University College London and NHS Bedfordshire, Luton and Milton Keynes ICB successfully became part of the NIHR Challenge Maternity Disparities Consortium.

The collaboration, led by Professor Keith Godfrey from University of Southampton and known as PREPARE, will work with partners to develop a 'whole maternity' journey for women and their partners, from preconception through post-delivery.

The University of Southampton has leading academics in this area, having co-founded the UK Preconception Partnership in 2018, whilst NHS Hampshire and Isle of Wight ICB brings extensive experience in co-developing and delivering preconception and interconception care in areas with high levels of ethnicity-associated and coastal disparities. Thanks to WHP, who facilitated the connection between the University of Southampton and NHS Hampshire and Isle of Wight ICB, this collaboration was made possible.



Prof Keith Godfrey
University of Southampton
Professor of Epidemiology & Human Development
and PREPARE Collaboration Lead

"When the government announced the £50m call for applications for research to reduce maternity disparities in January 2024, we quickly recognised the critical need to build a broad collaboration between academia, community healthcare providers and individuals from minoritised communities with lived experiences. WHP were instrumental in supporting the development of this broad collaboration. Following our successful application, WHP have remained a vital contributor to the activities of our PREPARE Collaboration, developing a "blueprint" for care and support before and between pregnancies to reduce the serious disparities in maternity outcomes evident in the Wessex region."



Katherine Baker Senior Research and Innovation Manager, NHS Hampshire and Isle of Wight

"Working alongside Wessex Health Partners over the past year has enabled NHS Hampshire and Isle of Wight to successfully collaborate on the Maternity Disparities Challenge, launched by National Institute for Health and Care Research (NIHR). This work will hopefully lead to the better outcomes for families both in Hampshire and the Isle of Wight and nationally."

## WHP/NIHR WEMN

#### 2. Small Grants Scheme



21 applications

15 successful applications

F219,848

WHP £170,048 | NIHR WEMN £49,800



61 applications

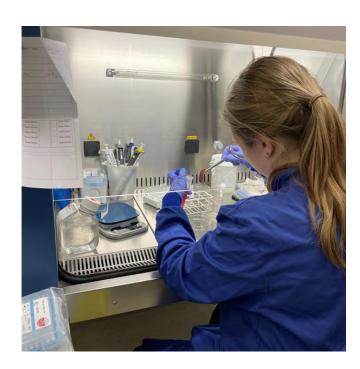
36 successful applications

Round

F279,190

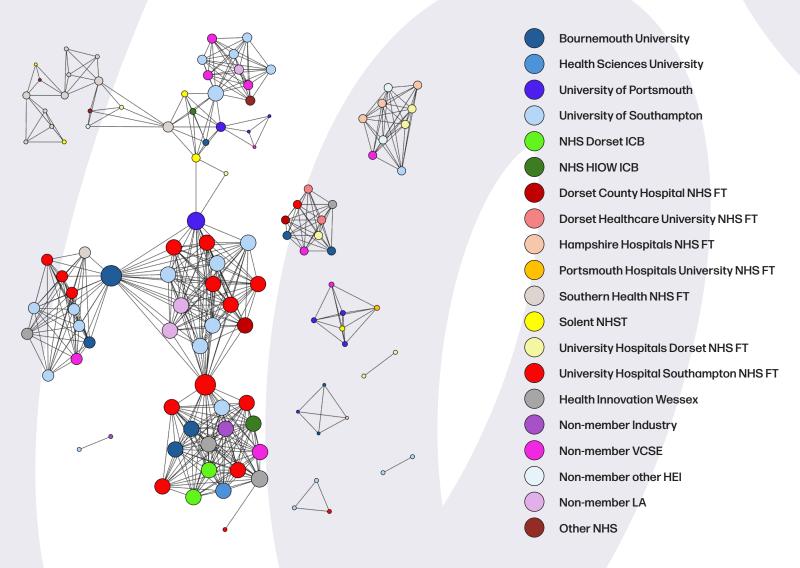
WHP £193.660 | NIHR WEMN £85.530

We bring researchers and clinicians together to address the pressing health needs of our region. With this in mind, we award up to £20,000 to collaborative projects which have real potential to improve patient care and outcomes. Our small grants also help us, overall as a region, respond to the government's three big shifts in healthcare.



#### 7. Fostering pan-Wessex collaborative research

This diagram shows the new collaborations that were formed for round 1 of our small grants scheme.



## Case study: Development of Al tools to improve prediction and treatment of sepsis



Dr Harjeet Singh Virk Consultant Clinical Microbiologist, Portsmouth Hospitals University NHS Foundation Trust (PHU)

Sepsis is a severe form of infection and a major global health challenge due to its high incidence, associated risk of death or serious health impacts, and societal costs of up to £10billion/year in the UK. Currently, we cannot systematically evaluate the quality of administered treatment, nor recognise early enough which patients are not responding to standard care with fluids and antibiotics and will deteriorate.

Dr Harjeet Singh Virk, Consultant Clinical Microbiologist at University Hospitals Portsmouth NHS Foundation Trust (PHU), is leading a project to test the feasibility of real-time prediction of sepsis in patients using Al data analysis.

"Earlier diagnosis means that patients will get the right treatment, they'll get the right rests ordered, and hopefully that will reduce their stay in hospital and lead to better outcomes." This project brings together microbiologists from PHU, University Hospitals Dorset NHS FT, and University Hospital Southampton with academics from University of Portsmouth and Bournemouth University. Following this, other linked projects have been funded by the Wessex SDE. Together these will lead to improved regional health outcomes with potential for national and international impact.

"Having an opportunity to be supported, especially within the wider region and being able to involve partners to reach similar goals and apply that knowledge regionally is where NIHR WEMN has really come in."

# Case Study: A regional collaborative network to boost impact and professional capacity in Metabolic and Steatotic Liver Disease research



Millie-Rose Doolan PhD student, University of Southampton

Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD) is associated with obesity as well as Type 2 Diabetes Mellitus (T2DM) and cardiovascular heart disease. This chronic liver disease is estimated to affect up to 1 in 5 people in the UK, and rates are increasing. The funding from WHP/NIHR WEMN has specifically helped start a new network across the region to bring together experts in metabolic diseases. Further funding from the UKRI-Medical Research Council and the NIHR will be sought.

Millie-Rose Doolan, a PhD researcher at the University of Southampton and part of the team, said:

"Fatty liver disease is a global health problem – latest figures suggest that up to 30% of the global adult population will be affected. Currently, high-risk patients cannot be identified, and treatment options are limited. By creating 3D organoids using patient tissue we can delve deeper into how the disease progresses and identify potential targets for treatment."

Specifically, NIHR WEMN small grant funding helped set up Wessex Spectrum - this includes pre-clinical researchers, radiologists and consultants, all with an interest in metabolic diseases.

"We're bringing together a wide range of experts who want to help tackle this global health problem and without this funding, this just would not have been feasible," said Millie-Rose.

# Case Study: Evaluating a virtual reality sensory room for patients with learning disabilities



Joe Salmon Research Delivery Lead Nurse (Mental Health), Hampshire and Isle of Wight Healthcare NHS Foundation Trust

Sensory rooms include elements that stimulate the senses, such as mirror balls, bubble tubes, fibre-optic sprays, projectors with colourful rotating images, aromatic oils, relaxing music, comfortable seating and padded floors. Over the years, these rooms have been widely used in varied settings, showing benefits in emotional and behavioural regulation, rehabilitation, education and learning, and mental health and wellbeing.

However, not all patients have access to such rooms. This project explores a new initiative to provide stimulating sensory input using a 360 visual of an interactive sensory room. The aim is to enhance wellbeing, sensory processing, adaptive behaviour, and reduce mental health symptoms in people with learning disabilities (LD) through a virtual reality headset.

"Patients with LD often experience heightened anxiety due to sensory overload, which can worse health outcomes," explains Joe. "VR offers personalised, calming environments that reduce stress and challenging behaviours. As the Wessex region is dispersed, it could benefit from scalable technology that offers greater accessibility compared to physical sensory rooms."

For this project, Joe Salmon and his team are taking into account views and recommendations from health care professionals and patients with learning disabilities across NHS Trusts in the Wessex region on the use of VR headsets. The next step is to broaden the collaboration and target Innovate UK for future funding.

# Case study: Advancing collaborative research on orthotic device innovations for paediatric foot drop



Dr Timothy Exell Senior Lecturer in Biomechanics and Rehabilitation Science, University of Portsmouth

Dr Timothy Exell, Senior Lecturer in Biomechanics and Rehabilitation Science at the University of Portsmouth, is working with OrthoPed to help develop a novel splint for children with foot drop, with a view to making a future NIHR Invention for Innovation (i4i) Product Development Award application.

"The funding is enabling extensive PPIE activities with children across Portsmouth and Southampton, and we are also speaking with clinicians who will prescribe the device, to get their input on the device and potential use within the NHS. So far the feedback is that the device is much easier to put on and comfortable to wear than current splints. The children feel more like their friends, it's not as visible to wear and they can take part in PE and other school activities."

Foot drop can affect children affected by cerebral palsy, stroke and other neurological conditions and those undergoing chemotherapy treatment. When the foot can't be picked up properly when walking, gait is slowed and the foot can catch, causing trips and falls. Current treatments are rigid plastic devices, or costly devices which take a long time to be fitted and manufactured. Orthoped is an off the shelf device, flexible, cost effective and comfortable.

Dr Exell added: "The funding from WHP and NIHR WEMN has been instrumental in allowing us to conduct really meaningful extensive PPIE activities, but also crucially to broaden the collaboration around this work. We now have an excellent team across the Universities of Portsmouth and Southampton, Portsmouth Hospitals University and University Hospital Southampton NHS Trusts, where we're bringing together different expertise in biomechanics and clinical studies."

# Case Study: The Dorset Children and Young Peoples Healthy Weight Workshop

The Dorset Children and Young Peoples Healthy Weight Workshop brought together academics, healthcare professionals and local authorities from across Dorset with NIHR Southampton BRC Nutrition, Lifestyle and Metabolism theme academics.

Promoting healthy weight in children and young people is one of the priorities for NHS Dorset with the aim of reducing the incidence in health conditions caused by childhood obesity. Working together, NHS Dorset, Health Innovation Wessex and WHP set the aim to learn from pioneering research and practice already underway in the region, and implement this in a way which will work for Dorset people. The output from this workshop has provided the evidence for a children and young people's healthy weight programme.



## Case study: Role of Pain Neuroscience Education in Prevention and Management of Persistent Postpartum Pain (Patient Public Involvement and Engagement Project)



Omer Elma Lecturer in Physiotherapy at Bournemouth University

Omer Elma, Lecturer in Physiotherapy at Bournemouth University, is leading a cross-organisational collaboration looking into Postpartum Persistent Pain (PPP). This is pain that continues beyond six weeks after childbirth, often alongside postnatal depression, which can have very negative consequences for a mother and her family. Fear of pain and anxiety can play a significant role in pregnancy. However, antenatal care lacks a specific component that addresses pain directly.

Pain Neuroscience Education (PNE) aims to help women reframe how they think about their pain, helping with better management and potentially reduced postnatal depression.

Omer's project is all about working with women and clinicians to explore how PNE might best integrated into prenatal care. Moving forwards, he plans to develop a specific PNE package adapted and individualised for antenatal care. Following this, Omer will conduct a pilot trial to test the implementation of PNE in antenatal care.

As Omer explains: "I want to help women feel more confident and in control throughout pregnancy, childbirth, and postpartum recovery."



# Case study: Living Better with Asthma Study (LIBERTY)



Anna-Maria Holt Senior Dietician, Hampshire Hospitals Foundation Trust (HHFT)

Anna-Maria Holt, Senior Dietitian at Hampshire Hospitals Foundation Trust (HHFT), is working on difficult asthma across Wessex. This is a significant healthcare burden, with University Hospital Southampton severe asthma service caring for more than 1,200 severe asthma patients, region-wide.

Patients have high treatment needs and considerable multimorbidity. Difficult asthma often represents a complex collection of conditions that can make life very difficult including obesity, anxiety and depression, dysfunctional breathing and inactivity. Targeted treatment interventions are needed to address these conditions collectively.

The Liberty study is a multimodal lifestyle intervention for patients with difficult asthma. The purpose of the dietary intervention is to guide participants in dietary goal with information about their dietary intake as the study progresses collected via digital app, with HHFT registered dietitian Anna Maria Holt leading on data validation and analysis.

Anna-Maria said: "This study is only possible through collaborative working including University Hospital Southampton NHS FT, Hampshire Hospitals FT, and University of Southampton. The wider research team brings together medics, nurses, seasoned researchers and other AHPs including physiotherapists and dietitians. This funding made it possible for me to be involved in this project."



# Case Study: Building capacity to understand the effect of pain in recovery from amputation



Dr Nils Niederstrasser Senior Lecturer, School of Psychology, Sport and Health Sciences, University of Portsmouth

Dr Nils Niederstrasser, Senior Lecturer, School of Psychology, Sport, and Health Sciences, University of Portsmouth, is working with amputees to help them better manage their pain.

"The grant enabled us to interview amputees from various backgrounds and various types of amputations. The lack of verified, easily accessible information on pain management has led to frustration and even anger among patients and created a sense of loss and desperation. This was identified as the most common theme among the interviews and corroborated by the clinicians in the co-creation workshops."

He's collaborated with colleagues in Bournemouth, Portsmouth and Southampton and will now work towards developing their findings into a project suitable for the NIHR's Research for Patient Benefits funding scheme. Dr. Millis said: "The grant has been really helpful in understanding specifically what patients want out of their pain management following their amputation and how that compares to what they are actually receiving. Talking to clinicians, we were able to explore some of the barriers associated with pain management. This helped us formulate a plan as to how we can enhance pain management following amputation."



# Case Study: Nourish the New You - Using creative methodologies to engage women in recovery from alcohol



Dr Chloe Casey, Lecturer in Nutrition and Behaviour, Bournemouth University

Wessex has high and increasing rates of alcohol-specific hospital admissions in women. The specific needs of women in recovery are poorly defined, and nutritional guidance is rarely included in relapse prevention services, despite the overwhelming evidence that alcohol consumption severely affects nutritional status.

Dr Casey's research explores the complex relationship between nutrition and mental health, with a particular focus on how nutrition can support alcohol recovery. Nourish the New You, her current project, is part funded by Wessex Health Partners. It draws on expertise within the University of Southampton, Dorset HealthCare, and Arts University Bournemouth to create a unique regional collaboration which will aim for larger funding in time.

"In health research, there are still so many areas where women are under-represented, and alcohol dependence is one of those," explains Dr Chloe Casey, lecturer in Nutrition and Behaviour, Bournemouth University.

"Women drink as much as men, are at greater risk of health consequences and suffer more alcohol-related harms. They experience more complex barriers to coming forward for help. And yet, most of the research continues to focus on men. I really want to change that."

"Nourish the New You is all about women's experience of alcohol recovery, and how we can best support them to maintain a healthy diet to support their sobriety," says Dr Casey. "Good nutrition is often neglected in treatment plans. The aim of this project is to reduce the risk of relapse."

### WHP Academic Themes

3. Our WHP Academic Themes bring together pan-Wessex collaborations to develop novel research on a scale greater than any individual organisations could manage alone.

#### In this way, we seek to address:

- Problems of importance to people living in Wessex, and/or
- Challenges identified by Wessex's health and care systems, and/or
- Global challenges where we have particular world-leading expertise

#### By:

- Utilising our academic strengths in partnership
- Working together in collaborations that do not currently exist.

The aim of the academic themes is to complement the excellent research already happening in the region by stimulating new collaborations. The ambition is to bring teams together to target external investment, with potential for national and international impact.

The academic themes were identified and developed through widespread consultation with partners.

#### The four academic themes agreed by the WHP Board are:

#### Services Health

The health and wellbeing of serving and veteran services personnel.

#### Health Inequalities and Multimorbidity

The harms associated with the intersection between alcohol, obesity and deprivation.

#### **Genomics**

The use of genomic medicine to limit the harms arising from polypharmacy in the elderly.

#### **Air Quality**

Investigating the impact of poor air quality on health and wellbeing.

#### 7. Fostering pan-Wessex collaborative research

Out of these themes, groups have worked to develop bids to large external funding bodies, with the intention of winning major programme funding.



4 themes

12 x workshops

100% partner organisation engagement







#### 7. Fostering pan-Wessex collaborative research



William Rosenberg Chair, Wessex Health Partners

"We're confident our new Academic Themes will have a big impact on the health and wellbeing of our communities. Wessex Health Partners is uniquely placed to create new collaborations between our universities and local NHS organisations - bringing experts together to develop new research projects addressing the health needs of our local populations with global reach. We have already seen groups coalesce under each of these themes and to start to develop research proposals for major external grant funding. In each instance the meetings that WHP has convened have introduced people with shared interests who have never previously collaborated to focus on new programmes of work. We envisage that the work conducted within these programmes will deliver immediate health and care benefits for the population of Wessex but also throughout the UK and beyond."



Dr Stephen Lim
Principal Clinical
Research Fellow,
University of Southampton
Honorary Consultant
Geriatrician,
University Hospital
Southampton NHS
Foundation Trust

"What Wessex Health Partners have done brilliantly is to bring the experts together to sit in one room - the theme has really successfully brought a range of experts together which none of us could have done by ourselves."



Prof Sarah Ennis
Professor of Genomics,
University of Southampton

"We need to consider our project from all the most important angles, via a range of experts, to come up with a powerful plan. Wessex Health Partners has been the glue – you've identified the pieces, and then glued us all together."

## 8. Growing our pan-Wessex R&I Networks

#### We support:

 Existing networks that would benefit from wider membership from across the WHP partners

#### and

 Emerging areas where there is significant regional activity and expertise that would benefit from being more formally brought together into an official network

Pan-Wessex networks bring together individuals with complimentary interests and expertise from different organisations and disciplines to share knowledge, connect and collaborate. Our emphasis is on joining up discovery, development and deployment pathways, and our role is to provide support and structure.



## Case study: Clean Air South

Clean Air South (CAS) represents a shared determination to create meaningful and lasting change to air quality for current and future generations. Over the year, the network has grown to 125 members representing 80% of the WHP partner organisations. The group recognises the multifaceted health impacts of air pollution, ranging from respiratory to cardiovascular and neurological diseases, and strives to develop solutions through research, innovation and education.

Co-hosted by WHP and University of Southampton's Sustainability and Resilience Institute (SRI) and Civic Centre, it aims to:

- Address the causes of pollution
- Develop effective treatments for those affected
- Help prevent the impact on health of polluted air for generations to come

WHP worked with local media to promote the launch of the network and its goals. Broadcast coverage included an extended ten-minute slot on BBC South Today, including a red-sofa studio interview with Sir Stephen Holgate. ITV Meridian, BBC, Portsmouth News and Southampton Echo all covered the story, raising awareness of the impacts of poor air quality and the efforts underway to make improvements.

WHP has helped facilitate, support and promote:

 Two face-to-face meetings bring together academics, health and care professionals, local authority representatives and clean air champions. Rosamund Adoo Kissi-Debrah shared her lived experience of air pollution's devastating effects, underscoring the critical importance of the network's mission.

"This was an excellent event and I felt so valued and heard throughout. The entire team were attentive, understanding, compassionate, and enthused. It really was a pleasure to be a part of. A massive thank you to all the organisers, it was an excellent opportunity for all, but especially for early career researchers such as myself."

Anon Feedback

#### 8. Growing our pan-Wessex R&I Networks

- An evidence-based report on air quality in the south central region. The report consulted on policy recommendations and identified research knowledge gaps.
- The SRI small grant funding funded a project to develop a central data hub to link in environmental data with health data for Wessex.



Sir Stephen Holgate
Professor of Immunopharmacology,
University of Southampton and content
expert for the Air Quality Theme

"Wessex has its particular air pollution challenges especially from shipping, wood burning, transport and farming with the greatest exposures occurring in disadvantaged communities. Coming together in this way gives us access to environmental and health data in Wessex, along with the expertise in our universities and local authorities providing a unique opportunity to understand more about how pollution is impacting people in the south."







# 9. Strengthening strategic partnership working with the voluntary sector



## We're keen to explore partnering with wider stakeholders to enhance our impact.

This year we have entered a special agreement with Health and Care. This charity has 40 years' experience supporting people across Dorset and beyond, and deep links with local communities. We agreed arrangements to collaborate strategically with the aim of strengthening our combined ability to bring people's voices into the heart of health and care research and innovation, ensuring that services reflect real needs and aspirations.



Mark Sharman CEO, Help & Care

"We are thrilled to formalise this collaboration with Wessex Health Partners. Together, we can harness our shared commitment to equality, inclusion, and innovation to make a tangible difference in people's lives. This partnership will enhance our ability to support individuals and communities through research-driven solutions and collaborative working."



# 10. Driving economic growth through the life sciences

Delivering health and care research is central to the Government's growth mission. In 2024/25 the WHP senior leadership team, working with Health Innovation Wessex:

- Developed contacts with senior leaders in the Local Authority Economic Growth teams in Wessex
- Established and convened regular meetings of the WHP Economic Growth Working Group
- Joined the Talbot Quarter Principles
  Group convened to drive the
  development of the Talbot Quarter
  in Dorset with the aim of providing
  intelligence relating to the Wessex R&I
  ecosystem to strengthen cases for
  inward investment

- Supported an Expression of Interest for a Regional Al Growth Zone (led by Hampshire County Council)
- Joined the Hampshire Super Cluster Forum
- Continued engagement with developers of potential Knowledge Campus in Winchester as part of Wessex R&I ecosystem development



## 11. What do our partners say?



Lara Alloway Chief Medical Officer, NHS Hampshire and Isle of Wight

"WHP enables us to move beyond organisational boundaries and collaborate in new and more effective ways to tackle the most pressing health challenges facing our population. The partnership brings together research, innovation and education in a way that enhances our ability to deliver better health outcomes and address inequalities across our region."



Helen Sloan Public Contributor, Wessex Health Partners

"In only three years, Wessex Health
Partners has formed strong collaborative
partnerships. It is now a key player in
the strategic development of health and
social care research and services in the
region, contributing significantly to their
development. Wessex Health Partners goes
from strength to strength and the signs
are that it will be even more important and
significant in the coming years."



Ashleigh Boreham
Deputy Director
Partnerships,
Research and Innovation,
NHS Dorset

"WHP brings people together to have those conversations which wouldn't otherwise happen - healthcare providers and academics who would never had the chance to meet. WHP is a convener of thought, of passion, of interest - producing outcomes which make a difference to our communities."



Louise Bell Head of Research, University Hospitals Dorset NHS Foundation Trust (UHD)

"There is so much expertise spread across the patch and WHP helps us make connections with clinicians who are the best in the region. Being part of WHP has also really helped our early career nurses, midwives and AHPs apply to the NIHR's Insight Programme. Several have been fully funded to study masters degrees which will really develop their research skills and experience."

#### 11. What do our partners say?



Dr Julie Northam Head of Research, Health Sciences University (HSU)

"Being part of a larger network offers significant advantages, fostering vital connections and collaborations between our staff and other experts across Wessex. Membership strengthens our connections with local healthcare trusts and other universities and provides insights into regional population healthcare priorities, enabling us to deliver impactful joint research projects."



Sarah Willis Genomics Innovation Director, Health Innovation Wessex

"WHP helps us connect with NHS Trusts, universities, and research organisations. This integrated network supports real-world data collection and usage, fast translation of research into clinical practice, access to biobanks and diverse patient cohorts, and access to funding opportunities. The partnership also ensures all members can benefit from the shared learning and examples of excellence within genomics, taking place across the region."



Prof Richard Thelwell Executive Dean, Faculty of Science and Health, University of Portsmouth

"WHP is of strategic importance to us as an organisation, providing links which facilitate all our health research – locally, regionally, nationally and, we hope, internationally. Being an active part of WHP ensures we match and align our priorities across the partnership, and this gives our research real world impact and significance."



Richard Mandunya
Public Contributor,
Wessex Health Partners

"Bringing together regional partners to collaborate makes WHP a really unique example of working together. From what I've seen so far, I'm encouraged that taking this approach will lead to transformative research and innovation. In the longer term, these novel solutions will save money for the NHS and the healthcare system as a whole, whilst on an individual level improving outcomes for patients."

### 12. What's next?



Christine McGrath Managing Director, Wessex Health Partners

"As we mark the end of our second year of being operational we can already see the benefits of our regional approach to academic health science collaboration. We are so proud of how our partnership has developed in just a short time, and the fact we are increasingly seen as an exemplar of excellence in partnership working.

We've been focusing hard on building a culture across the region of working together in the research and innovation space. This really opens up the potential for all our organisations to play above their individual strengths and create impact not just regionally and nationally, but internationally too.

By combining our excellence we are accelerating our impact. This means we are improving health and care outcomes, and we can all take pride in this.

Thank you for reading our first impact review. We will have many more successes to share with you in the future as our partnership builds momentum and we begin to see the fruit of our combined and collaborative efforts."







## Contact us

If you are interested in connecting and collaborating with us, or have an idea you are keen to discuss, we'd like to hear from you.

Email us at enquiries@wessexhp.org.uk or call 023 8202 0840



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