Improving Lives Through Research

2023-27 Research & Development Strategy

Plan on a Page



Our Research & Development Strategy: 2023-27

At Sandwell and West Birmingham NHS Trust, we envision a future where health outcomes are continuously elevated, and our population is at the heart of all healthcare advancements. We are committed to fostering a culture of innovation, where partnerships flourish and diverse perspectives drive transformative research.

In our five-year strategy, the Trust recognise the importance of Research and Development in achieving **our three strategic objectives**, known as the '3 P's'. These are:

- 1. Our patients to be good or outstanding in everything we do;
- 2. Our people to cultivate and sustain happy productive and engaged staff;
- 3. Our population to work seamlessly with our partners to improve lives.

Our purpose as an organisation is to improve **life chances and health outcomes**, underpinned by our values of **ambition**, **respect and compassion**.

Research and Development plays a pivotal role in **advancing standards of care** by continually pushing the boundaries of clinical knowledge, validating the effectiveness of new treatments, and uncovering innovative approaches to patient care. Some of our recent highlights include:

- Our contribution to a national trial for haematology that has **changed NICE guidance**; two new treatments are now recommended for newly diagnosed myeloma patients after autologous stem cell transplant
- Our gynaecology team have led on **ground breaking research** that found folic acid is helpful in treating menopausal symptoms including hot flashes.
- Our contribution to a national maternity trial has led to **changes in practice** for miscarriage through the use of progesterone in early pregnancy.

Increasing research knowledge and experience across all staff groups will help to expand this opportunity to more of our patients and local population, as well as improving career development and **staff experience** for our colleagues. Throughout the last 20 years, **life expectancy** in the population we serve has remained lower than the national average, and research is a vital route to improving this.

This strategy is developed in the context of:

- Our growing role externally, working as part of Birmingham Health Partners and in the Black Country, and Birmingham and Solihull Integrated Care Systems;
- The importance of all professional groups and specialties participating in research;
- Growing research which is relevant to our population.

This strategy aligns with the timescales of our Trust strategy, setting a medium term horizon as we build the necessary foundations of a long term transformation.

We are already an established teaching hospital, and this strategy sees our ambitions grow further to explore becoming a university hospital. In doing so, we aspire to **improve lives through research** – of the patients we treat, the people we work with, and the population we serve.

Where are we now?

Nationally, the research and development landscape has changed significantly since COVID-19. The research infrastructure allowed for the UK to be international leaders of research diagnostics, vaccines, and treatment for COVID-19. This has led to increased focus and engagement from the Government and commerce with the 'health and wealth of the nation' being at the forefront of the national agenda. COVID-19 showcased the power of research to the public, and patients are enthusiastic to access research opportunities.

Research in Birmingham and the Black Country

Over the last five years, the Trust's research activity has performed well compared to peers in the Black Country Integrated Care System (ICS). During COVID-19 there was little activity that was not directly related to the pandemic, and the Trust has not recovered to its pre-COVID activity levels. This is reflected in the table below showing participant recruitment and active studies.

| | Recruitment (Studies Open) | | | | |
|--|----------------------------|------------|-----------|-----------|-----------|
| Trust | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| Sandwell & West Birmingham NHS Trust | 2506 (102) | 2033 (87) | 2848 (33) | 3061 (37) | 1440 (22) |
| Dudley Group NHS Foundation Trust | 1706 (83) | 1418 (78) | 2109 (48) | 1445 (53) | 519 (43) |
| Royal Wolverhampton NHS Trust | 3733 (119) | 4348 (127) | 5365 (52) | 3260 (74) | 1827 (65) |
| Walsall Healthcare NHS Trust | 528 (37) | 503 (15) | 1465 (14) | 259 (11) | 457 (20) |

Within our region, the Trust joined Birmingham Health Partners in 2022. Birmingham Health Partners (BHP) is a cluster of 7 clinical and academic organisations, sharing the common goal of achieving health and economic impact through the purposeful use of knowledge and expertise. Joining BHP has strengthened our opportunities to collaborate in research, share knowledge, and contribute to improved health outcomes of our population.

BHP have developed a 2030 strategy visualised in the diagram below, which sets out a vision to be recognised as a leading UK Academic Health Sciences Centre by 2030.

| By 2030 Birmingham Health Partners | Our Vision will be recognised as one of the UK's leadi | ng Academic Health Sciences Centres |
|------------------------------------|---|--------------------------------------|
| 0 | <i>Our Goal</i> ystem based on ground breaking research : ies, and will deliver high quality care that is | |
| | We Will Deliver by | |
| Translating research into practice | Integrating technology into practice | Building the workforce of the future |
| | Driving economic growth | |
| Thro | ugh our actions we will grow health e | quity |

The strategy also identifies four strategic health priorities, which reflect the needs of the population and align with the wider Birmingham and Solihull ICS 10-year strategy. These are:

- Mental health
- Cancer outcomes
- Maternal health and infant mortality
- Inflammation and chronic disease.

In developing our Trust research and development strategy, it is important that we continue to align our priorities with the needs of our population and the shared aims of our partners.

Our Research Portfolio

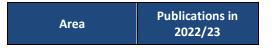
Overall, there are more than 30 research active specialities across the Trust.

As a Trust we have historically recruited the most participants in cardiology, ophthalmology, cancer and musculoskeletal disorders. Together, these areas account for 61% of our participants recruited since the National Institute of Health Research was formed (2008). However, in recent years the spread of our research portfolio has changed, as shown in the table below. Whilst this decrease in areas of the portfolio such as Cardiology and Ophthalmology is similar in Birmingham and the Black Country, it is a more significant reduction in the Trust than our peers.

| | % Trust Portfolio – Participants Recruited | | |
|---------------|--|------------|--|
| Area | 2008-2023 | 2021-2023* | |
| Cancer | 19.5% | 53% | |
| Cardiology | 12% | 0.4% | |
| MSK | 15% | 8.5% | |
| Ophthalmology | 14% | 0.2% | |

*period shows post pandemic performance

Our publication output reflects a similar portfolio spread, with 301 total publications in 2022/23. This activity has increased compared to previous annual averages (2014-2023 this has averaged 235). The largest output areas are shown in the table below.



| Rheumatology | 63 |
|------------------|----|
| Ophthalmology | 39 |
| Cardiology | 22 |
| Oncology | 17 |
| Gastroenterology | 16 |

In recent years the Trust has seen a rise in activity from other areas. Gastroenterology, general surgery, orthopaedics, and intensive care all being more engaged in research, as well as non-medical professionals.

Staff engagement

The Trust currently employs approximately 7,800 staff, of which around 5,600 are in a clinical/patient facing role. 143 (2.5%) staff members engage in some type of research activity as measured through the number of Principal Investigators registered with R&D. Historically the Trust had 9.6 Full Time Equivalent (FTE) of jointly appointed clinical academic posts; however, the current position is 6.15 FTE. These posts are all doctors and employed across a range of universities and specialties. Including Maternity, rheumatology, ophthalmology and musculoskeletal with University of Birmingham, Aston University, and Keele University.

The reduction in joint posts adds to a perception amongst clinicians of depleted time, resource and enthusiasm for research activity. We must change the perception that research is an aspiration and move towards a culture of research being a core part of our services and career development. Within the Research and Development department itself, there has been turnover in leadership at Head of and Deputy Director level in recent years. In creating an environment of 'research for all' a cultural and mindset shift is required along with the right support infrastructure. In recent years the organisation has successfully developed Specialty Research Lead roles within each speciality across the organisation. These include a clear description of the remit of the role and most of these roles have been successfully assigned. These roles meet regularly with a view to promoting and pro-actively managing research across the speciality. Research is now an active part of medical job planning with systems in place to objectively review and assign dedicated time for this.

A research group for Nurses, Midwives, Allied Health Professionals, Healthcare Scientists, Pharmacy Staff and Psychologists (NMAHPP) has been established since 2021. Whilst in its infancy, the group already has many members and meets regularly to support research endeavours. In a recent survey undertaken at the Trust, 31 NMAHPP staff report being engaged in some kind of research activity, with 56 having published in some format in the last 5 years. However, only seven had been awarded PhDs and the majority reported that their MSc was the only source of research training they had undertaken. Clinical research is often dominated by medical staff, this can be complimented and further enhanced for the benefit of all if the enthusiasm and engagement is harnessed and capitalised upon. Such an engaged group is a real asset to the organisation.

Income

The Trust has approximately £500k of research income where they are the grant holder and 18 grants with co-applicants or Chief Investigators (8 staff). Research income forms less than 0.5% of the overall income for the Trust. Compared to university hospitals in the region such as University Hospitals Birmingham and University Hospitals Coventry and Warwickshire research income is 1%, indicating there is opportunity to improve this position.

The Trust has historically attracted a high level of commercial research but in recent years this has depleted both in income and participants recruited. From 2008-2023 commercial recruits have made up 3% of

recruitment to studies across the organisation, which mirrors the West Midlands position. However, this was depleted to 0.5% between 2021- 2023.

What will be different?

Our vision is to be a research active organisation that inspires and involves our patients, people and population in impactful research. By becoming more active and engaged in research, we will improve life chances and health outcomes.

Our **Patients** will be actively informed about research that is relevant to them. Staff will feel confident to engage patients in every stage of research in inclusive ways.

Our **People** will be inspired and supported to be part of research. We will provide opportunities for learning and celebration in all parts of the organisation and professional groups.

Our **Population** will have access to research which meets the needs of local, regional and national priorities of health and social care. Our partnerships will flourish, driving impactful outcomes for all.

In delivering this vision, the following measures of success will be tracked:

- Increase number of studies open and recruiting by 10% each year.
- Increase in number of patients participating in research, with an increase in the under-served communities.
- 3 examples of research led by SWB which has changed practice by 2028.
- Increase the number of grants submitted where SWB are grant holders.
- Increase retained commercial income to the department by £50k per year of the strategy.
- An increase in substantive jointly funded posts with HEI.
- Increase in the number of Chief and Principal Investigators by 10% and 50% respectively.
- Increase the number of PIs from all professions (medical and NMAHPPs).
- Meet Performance in Initiating and Delivering Research metrics.

What improvements will we make?

We have identified four work streams that will support achieving our vision, shown in the diagram below.

| Leading Areas of Research | Patient & Public Engagement and Involvement |
|------------------------------|---|
| Outstanding | Enable All Staff |
| R&D | to be Part of |
| Department | Research |

Establish and Improve Leading Areas of Research

This workstream will build on historic success and grow emerging areas of research strength that reflect the needs of our population.

Our areas of preventable causes of death mirror the most common nationally, yet our preventable deaths per 100,000 population are higher than the national average. These areas include cancer, cardiovascular disease, liver and respiratory conditions. This provides clear direction to pursue research that will improve life expectancy in our population.

We also serve communities with high levels of deprivation, unemployment, and disability. Following minor illnesses like coughs and colds, musculoskeletal (MSK) problems are the leading cause of sickness absence. MSK problems, such as back pain, are also a significant factor in 'health-related worklessness', where health conditions are the cause of unemployment. By innovating in this area, we can affect the wider determinants of health such as economic factors that affect mortality and morbidity.

In balance to these areas of population need, to grow a research active organisation we must continue to grow our bright spots. These exemplar services can support and inspire others to be part of research.

We will therefore focus on the following areas of research:

Leading causes of mortality and morbidity:

- Cancer
- Inflammation and chronic diseases
- Musculoskeletal and orthopaedics

This aligns to two of the four BHP health priorities: Cancer outcomes and Inflammation and chronic disease. This approach also aligns to the national Major Conditions Strategy (August 2023) published by the Department of Health and Social Care.

Local trailblazers:

- Ophthalmology
- Critical care
- Trauma & orthopaedics
- General surgery
- Gastroenterology

Integrating technology into practice:

• Artificial intelligence, 'big data' and imaging

This aligns with the BHP strategic goal of the same name.

Our key actions are:

- Establish an internal accreditation system for departments and specialities to become 'Research Exemplars'
- Further embed the role of Specialty Research Leads across the directorates.
- Provide access to a range of research training and education opportunities for all disciplines and levels across the organisation.

• Produce access to accurate and relevant business intelligence to inform decision making for research at directorate, group and Trust level.

Patient & Public Involvement and Engagement

This work stream will build our approach to engaging our local communities to be part of research. At the heart of this strategy lies the understanding that patients and the broader population are not mere recipients of healthcare services, but active stakeholders who possess invaluable insights into their own health experiences.

By engaging the public as collaborative partners, we embrace a bottom-up approach that uncovers realworld challenges, preferences, and unmet needs, laying a strong foundation for patient-centred research. We need to ensure their voices are heard, but first we need to listen. We also need to improve our internal systems so that we can look at what demographics are represented in our research, and track this over time.

In other Trusts, there are donation drives where the public can donate to specifically support Research & Development, a growing interest following COVID-19. Following the opening of Midland Metropolitan University Hospital (MMUH), we will work with our Trust Charity to prioritise similar ways of donating directly to Research & Development.

Our key actions are:

- Increase the visibility and identity of the R&D Department internally and externally.
- Work with our patient experience and communications teams to conduct a series of listening events with our communities to shape our approach.
- Establish Patient Research Ambassadors, giving our population an active voice in research that is designed and delivered across the organisation.
- Develop internal system to establish and track demographics of our participants to establish if these are reflective of our population.
- Work closely with Trust Charity to donate directly to Research & Development.

Outstanding Research & Development Department

This work stream develops the in-house team skills, capabilities and processes, so that it can support **all** wishing to engage in research.

Currently the department has several nationally monitored Key Performance Indicators (KPI) focused on set up and delivery of projects. However, these do not reflect the breadth of service need such as training, statistical support, career pathways, sponsorship or quality assurance. In addition, the availability of the national KPI data is slow and has limited access outside of the department, such as the specialty research leads. This makes managing and improving the service across the organisation more difficult.

To be an outstanding department we must first assess the needs of our stakeholders and refine what is currently available and build on existing resources, utilising, local, regional and national frameworks.

Our key actions are:

- Implement and maintain a robust quality management system for sponsorship and delivery of research.
- Develop and implement business intelligence reporting which is timely and useful to users including set up times, delivery and follow up according to speciality.

- Review, evaluate and implement a financial system which enables accurate monitoring and reporting of research income, expenditure and investment for research projects.
- Establish the needs of our people wishing to engage in research, to tailor services, investments and developments to meet needs in service and further enhance services already offered by the Department.
- Support the Trust Library and Knowledge Services to develop an ICS wide Repository to showcase all research publications and demonstrate 'research active' status to external organisations.

Enable All Staff to be Part of Research

This work stream grows the environment in which research can thrive; where staff feel supported, skilled and inspired to be part of research. This may be through actively engaging patients into research that is relevant, undertaking their own research, or sharing learning.

To support all staff to be part of research, awareness and knowledge must be raised. Whilst there are highly experienced colleagues in the Trust, in the organisation more widely many staff are not confident when discussing research. Managers and leaders often struggle to release staff for research activities whilst managing the competing demands of service provision. Enhancing understanding amongst these groups is crucial if a culture of research is to be established. As well as awareness, we will develop and deliver innovative, collaborative and valuable opportunities for education and training.

We must also address the losses in joint funded academic posts. We have added a focused question at every Consultant interview, and we are adding a section to each job advert about research opportunities including BHP.

Our key actions are:

- Undertake an organisational survey similar to the national Clinical Academic Roles and Career Pathways Implementation Network (CARIN) survey to establish baseline levels of understanding, engagement and research training. This will help inform service provision and the departmental offer.
- Develop mechanisms to track and record engagement and staff participation in research.
- Develop a clear research training programme providing access to a variety of skill needs which meets the needs of those wishing to engage in research at all levels.
- Provide access and signposting for funding opportunities for research.
- Engage senior leaders in the value of research to support staff to engage in research.

| Area | Key Deliverables before opening MMUH | After the opening of MMUH until 2027 |
|--|---|---|
| Establish and Improve Leading Areas of Research | Establish an internal accreditation system for departments and specialities to become 'Research Exemplars' Review of baseline data for substantively appointed posts with HEIs across the organisation regardless of profession | Launch and implement an internal accreditation system for SWB Centres of Research Excellence Provide an array of opportunities for formal training opportunities to develop the next generation of researchers |

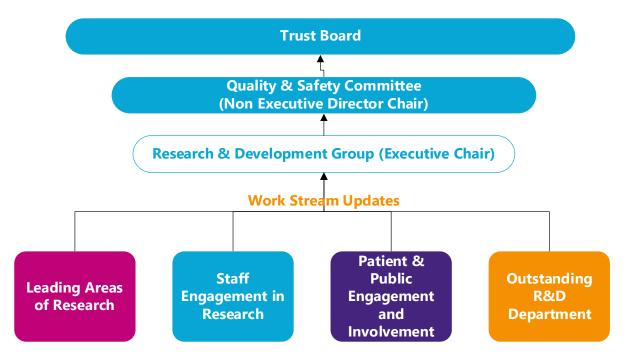
Research & Development Delivery Plan

| Area | Key Deliverables before opening | After the opening of MMUH |
|--|---|---|
| Area Enable All Staff to be Part of Research | Key Deliverables before openingMMUHDevelop a system to monitor and recordstaff engagement and participation inresearch to establish baseline activityHost Celebration of Practice Event toprovide opportunities to share andpromote research across staff.Provide a mechanism for signpostingthose interested in research toopportunities available.Engage senior leaders in the value ofresearch to support staff to engage inresearch. | After the opening of MMUH until 2027 Provide and increase the levels of engagement and participation in research by staff across all professions. Further develop the Specialty Research Leads roles within the department and those of Care group structures Implement clear channels of communication for opportunities, training and development for those interested in research, |
| | | considering a single point of access. |
| Outstanding Research & Development Department | Understand the training and education needs of those interested in research to develop and implement a relevant and useful training and education package Implement and maintain a robust quality management system for sponsorship and delivery of research Implement systems for business analysis and finance specific to research to enable informed decision making as to research portfolio on a speciality, care group and trust level. | Develop and implement a comprehensive training package for access to research training for those interested in research Produce and embed speciality reports which link to clear governance structures across the organisation Support the Trust Library and Knowledge Services to develop an ICS wide Repository to showcase all research publications and demonstrate 'research active' status to external organisations. |
| Patient & Public Engagement and Involvement (PPIE) | Establish the current patient demographic of those participating in research across the organisation. Develop role descriptors for Patient Research Ambassadors Appoint a PPIE representative, with clear remit to input into key research meetings Establish a tailored communication plan to raise visibility and engagement of R&D department services and opportunities. | Develop mechanisms to ensure that research undertaken at the organisation is inclusive of our population Appoint and support Patient Research Ambassadors to champion and be a 'voice' for research across the organisation and population Increase visibility and understanding of research across the organisation. |

| Area | Key Deliverables before opening MMUH | After the opening of MMUH until 2027 |
|------|---|--|
| | | Work closely with Trust Charity to support R&D direct donations and promotion. |

Governance

To create the right structures to deliver against the plan, the following governance framework shows how the strategy aligns into Trust governance. Chief Medical Officer Mark Anderson chairs the Research & Development Group which will be the core delivery group for this strategy.



Research & Development oversight is within the terms of reference for Quality Committee, receiving a biannual assurance report. Quality Committee receives performance reporting on identified key metrics each quarter. To increase oversight of Research & Development the following metrics are proposed for Quality metrics:

- Number of participants recruited into research projects across the organisation. Target of 2500 per year, (to be reported monthly).
- Average number of days taken to Initiate a study at the trust. (average number of calendar days from 'date site invited' to 'date site confirmed' in that quarter. Target of 40 calendar days.
- Average number of days taken to recruit the first participant into a study at site (average calendar days from 'date site invited' to date first patient recruited' at Trust in that quarter. Target of 70 calendar days.

These metrics form part of the national metrics publicly available for all NHS trusts and are often quoted and used as comparators in the research arena.

As we work closer with partners in the Black Country through the Joint Provider Committee, we are reviewing how we align governance including the role of research and development.