

WORCESTERSHIRE ACUTE  
HOSPITALS NHS TRUST

**RESEARCH &  
INNOVATION**

# Strategy

2022-25

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## EXECUTIVE SUMMARY

*"We need to develop our research and innovation capability to improve outcomes, attract the best staff and increase the organisation profile*

*– Worcestershire Acute Hospitals NHS Trust Clinical Services Strategy"*

Academic evidence and consultancy evaluations of healthcare systems demonstrate that research-active organisations benefit patients, staff and the NHS because:

- **Outcomes for all patients are improved regardless of whether they themselves take part in a research study**
- Trust are higher performing in Key Performance Indicators
- Mortality rates are lower
- Staff recruitment and retention are enhanced
- Income is generated and cost-savings are made
- Patients are more likely to receive chemotherapy in a trial

We are in one of the most challenging times for the NHS and research has never been more important. An active strategy is needed so that we address the needs of our patients, colleagues and healthcare service through research and innovation, making best use of our resources to change and improve the care we provide.

This strategy will raise awareness of and increase engagement with research and innovation, from Board to bedside and will result in:

- Increased participation in research.
- Increased income and improved efficiency.
- Enhanced reputation externally.
- Successful clinical recruitment to hard to recruit to areas.
- Opportunities to create new roles within the Trust's workforce to support delivery of the Clinical Strategy.

Ultimately our realistic implementation plan, will improve patient experience of care, improve quality and ultimately ensure that we are putting patients first.

# THE STRATEGIC CONTEXT

The 2019 **NHS Long Term Plan** set out its vision for the NHS, which will accelerate the redesign of patient care to future-proof the NHS for the decade ahead. It shifts the focus to collaboration and system-wide healthcare that will mean we are working in a local integrated care system. **The plan recognises the critical importance of research and innovation** to meet these needs, and pledges that the NHS will play its full part to benefit patients and the UK economy.



To address workforce challenges, the NHS **People Plan 2020/21** commits to making the NHS the best place to work. **It identifies research as an opportunity for a diverse career**, pivotal for clinician recruitment and retention.

It is clear that research is not an optional extra for the NHS. A growing body of evidence demonstrates that outcomes for all patients are improved in research-active organisations, regardless of whether they took part in a research study. There is an expectation of dramatic and sustained improvements in the performance of NHS healthcare providers in both the initiation and delivery of research studies. This is reflected in the **NHS contract** between commissioners and providers, and is reinforced by the **NHS Constitution** which explains that patients should expect their healthcare providers to be involved in research. The **Care Quality Commission** also includes research and innovation under its **'well-led' criteria**.

## IMPACT OF COVID-19 PANDEMIC

The novel SARS-COV-2 virus was an unprecedented situation for the NHS, requiring urgent transformation of services. From the outset, research was pivotal to the government's response. In March 2020, there were no studies in covid-19. Three months later, a clinical trial, with Worcestershire Acute as a participating centre, had recruited over 10,000 patients and demonstrated that dexamethasone, a cheap and widely available drug, can improve health outcomes for those most severely affected by the disease.

Never before has a clinical trial demonstrated positive results this quickly and changed practice overnight. This was made possible because the research infrastructure was in place within the trust and the wider NHS and could be reprioritised to support urgent public health studies, and demonstrates what it is capable of when charged to act. **Protecting this ability for future pandemics and NHS challenges is therefore paramount.**

# NATIONAL RESEARCH LANDSCAPE

Funding is made available from the Department of Health and Social Care through the NIHR Clinical Research Network West Midlands to employ research staff in the Trust so that it is able to contribute to NIHR portfolio studies.

These are trials judged to be of high value to patients and the NHS and are important to contribute to for the future of healthcare.

Underpinning this are performance standards that NHS organisations in receipt of funding are obliged to contribute to.

Commercial research is also a source of income to NHS research departments, creating opportunities for income generation, and is strongly encouraged by the NIHR.

Research Capability Funding and grant funding are ways to encourage research development that is home-grown and led from Worcester. Collaborations with Higher Education Institutions help to underpin this activity.

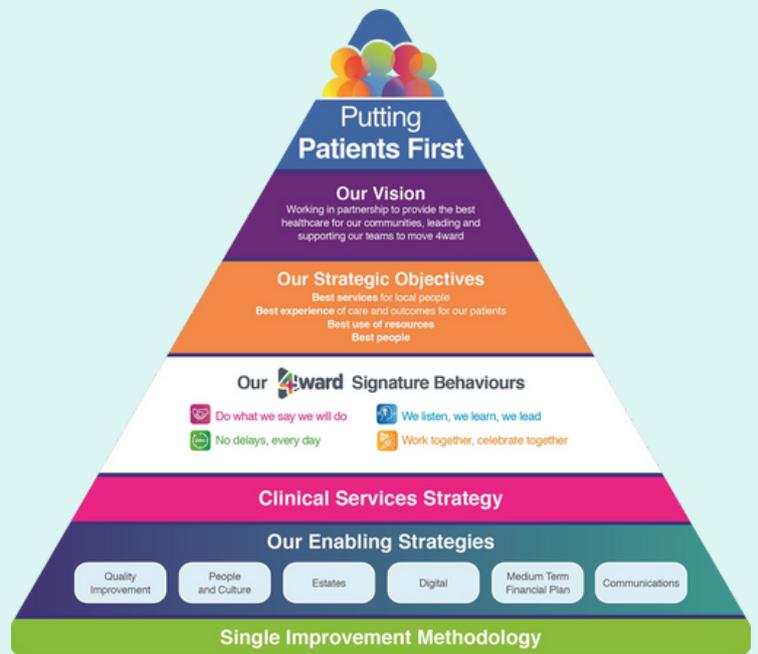
This strategy must be mindful of the national agenda for research in the NHS and reflect the overarching objective of improving outcomes for patients – ‘making patients and the NHS better’.

## LOCAL CONTEXT

In Worcestershire, implementing the Long Term Plan will be realised through the **Sustainability and Transformation Plan**, joining up healthcare across Herefordshire and Worcestershire to improve population health outcomes through integrated care partnerships.

The **Clinical Services Strategy** provides detail of this vision for Worcestershire Acute Hospitals by 2025. Research and Innovation are enablers of this strategy.

Integrated healthcare will require a joined up research and innovation service. The Research and Innovation team currently work in partnership with our Integrated Care System, Foundation Group and Gloucestershire colleagues as part of the Herefordshire and Worcestershire Research Consortium.



It is vital that Clinical Research and Innovation plays a key part in the Trusts enabling strategies to implement the Clinical Services Strategy

# WHERE RESEARCH IS NOW : 2022

Primarily, the Trust acts as a supporting site to NIHR portfolio trials. Over the past 4 years over 1,000 participants have been recruited per annum, with peaks and troughs dependent on availability of large observational studies. These are supported by a cross-cutting research team.

Interventional trials offer the greatest direct potential to benefit patients, and have the largest impact on quality. Generally, interventional studies account for an average of 28% of recruitment in the Trust.

There are many successes in the Trust, with strengths and a track record in oncology, haematology, cardiology, respiratory, vascular maternity, ICU and surgical research.

During the Covid pandemic, it was the second highest centre in the West Midlands for recruitment into the RECOVERY trial, enabling over 20% of patients to be entered onto a trial. This is significant given the number of larger organisations in the region. As a result the Trust was shortlisted for the CRN Research Team of the Year (result TBC).

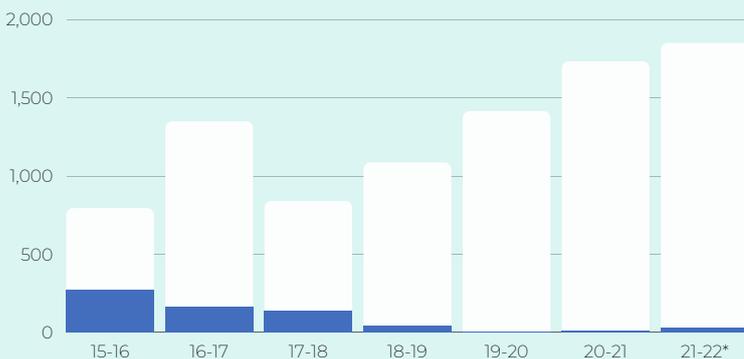
The Trust has continued to build on this success and is currently the fifth highest recruiter of patients in the West Midlands outside of primary care in 2021-2022. Three large trials have contributed to this including ISARIC, COPE (covid), CHOICE (midwifery).

Our commercial portfolio is more limited, with strengths in cardiology, vascular and oncology. The blue bars in the graph show a reduction in commercial activity over time. A future focused funding model must focus our activities for a better balance.

Another way to generate income and improve sustainability is to host National Institute for Health Research grants. These can increase our Research Capability Funding received from the Department of Health and Social Care, which at time of writing is 28p per £1 of grant. In addition, the development of more 'home-grown' research will enable the Trust and ICS to target areas of unmet need.

Joint academic appointments may help attract and develop clinicians in areas that have been difficult to recruit into. Support for development is available through funding for schemes such as Clinical Trial Scholars in the CRN West Midlands. Thus far, we have had one successful appointment and one shortlisted (awaiting outcome).

We are also strengthened by our partnership with Wye Valley NHS Trust by hosting their Research Management service under a service level agreement, and our collaboration with Cure Leukaemia who part-fund a research nurse.



Number of participants recruited into NIHR research studies 2015-2022, blue indicating commercial studies

\*21-22 as of Jan 22

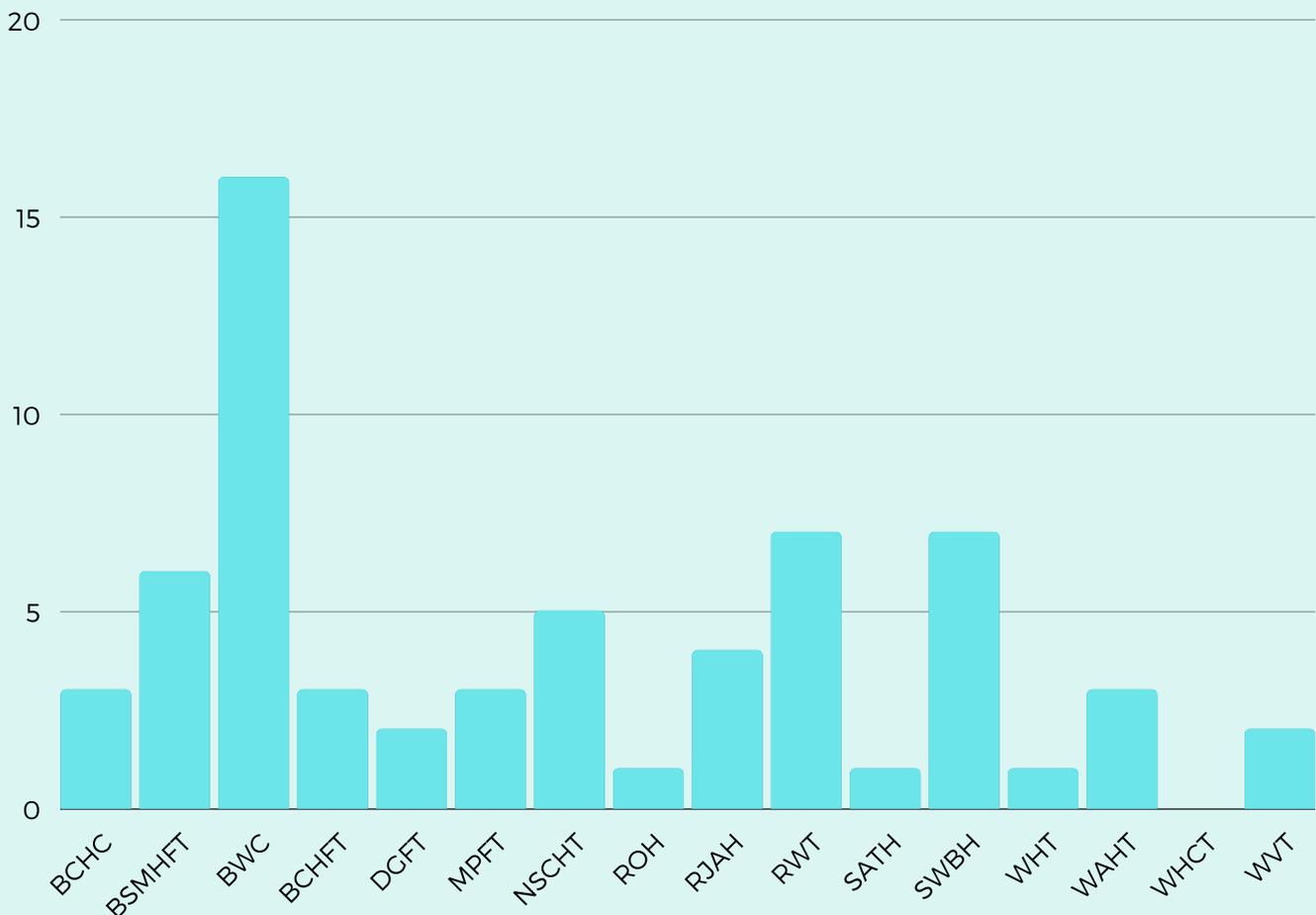
# WHERE INNOVATION IS NOW: 2022

The Trust Research department rebranded in 2020 to include innovation.

The Trust engages with the CRN West Midlands Innovation and Improvement funding, recently being awarded funding for four projects to improve research in the region. These will look to:

- investigate the potential for a research vehicle
- explore options for a shared research office
- enable digital improvements in the research workforce
- facilitate mapping and collaborating of investigators, increasing PIs

A further strand of this is product development. We work closely with our partners MidTech and Academic Health Sciences Network to support patent and IP protection, and Industry collaboration. A recent idea developed by the research and innovation department was awarded the AHSN Medical Technology Product of the Year. There are currently two further projects in development, one with an Industry partner and one currently identifying a funder. A comparison of our peers in the West Midlands (university Trusts excluded) are provided below.



# STRATEGY AIMS

The Research and Innovation strategy is one of the building blocks of our Trust vision of putting patients first. Being delivered in accordance with our 4ward signature behaviours will contribute to our strategic objectives of providing the best services for local people, delivered by the best people.

Our research participants will have the best experience of care, improving quality across the board. We will ensure that our research team makes the best use of the resources from the NIHR, research funders and charitable funding.

This strategy will raise awareness of and increase engagement with research and innovation, from Board to bedside and will result in:

- Increased participation in research.
- Increased income and improved efficiency.
- Enhanced reputation externally.
- Successful clinical recruitment to hard to recruit to areas.
- Opportunities to create new roles within the Trust's workforce to support delivery of the Clinical Strategy.

## AIM 1: INCREASE PARTICIPATION IN CLINICAL RESEARCH

For over a decade the NHS has had its own Research and Development arm, the National Institute for Health Research (NIHR). Within this, the Clinical Research Network (CRN) exists to support Trusts' participation in research. All NHS Trusts participate to at least some degree in research, and the opportunity for patients to participate is recognised as a right in the NHS Constitution.

Evidence shows that Trusts which participate more intensively in research have better clinical outcomes even for patients not themselves directly involved in research trials. Research participant experience surveys now run regularly by the NIHR Clinical Research Network show that 90% of patients have a good experience of participation. The majority take part through altruism. They want future patients to have improved treatments and for knowledge of their condition to advance. They also often take part because they receive better monitoring of their condition during a research study.

Any future improvements in service delivery will rely on evidence generated by current research activity. During 2020, the COVID pandemic highlighted what can be achieved when research is prioritised.

The rapid recruitment of patients from a wide range of organisations led to the discovery of effective treatments for the infection. In the RECOVERY trial, recruitment was disproportionately high in many non-teaching Trusts supported by many clinicians not previously involved in research.

It is particularly important for Trusts such as ours to participate in research. By widening the number and range of organisations participating in research, we make access to the latest treatments more equitable, enabling participation not just to the privileged population that can travel to a teaching hospital.

Secondly, research carried out in the organisations which deliver most of the care, such as ours is likely to deliver results which are more representative and applicable.

Working across the research consortium and with our system partners, we hope to have involvement in projects that take place across the Integrated Care System, including primary care and within the community.

# HOW WILL WE MEASURE SUCCESS

## Develop our research collaborations:

As part of the Herefordshire and Worcestershire Research Consortium and the Integrated Care Strategy, the Trust will develop Clinical Research and Innovation to ensure equity across the ICS to improve patient care, outcomes and participation. The Foundation group will work to identify opportunities for collaboration. Our partners with the CRN will support us to develop the resources needed to meet the needs of the research ecosystem.

Working with our local universities and CRN we will develop academic opportunities such as the Clinical Trial Scholar programme. We will apply for fixed funding opportunities to improve access to research and encourage the associate PI scheme and development of non-medical PIs.

## Make the best use of our resources:

Reviewing the skill mix within the team will ensure the resources are available to support clinical trials. We will work with the CRN to increase our flexible resource and aim to host ACROSS staffing in the Trust. We will work with our partners to share resources where possible, starting with our internal research teams providing a unified service.

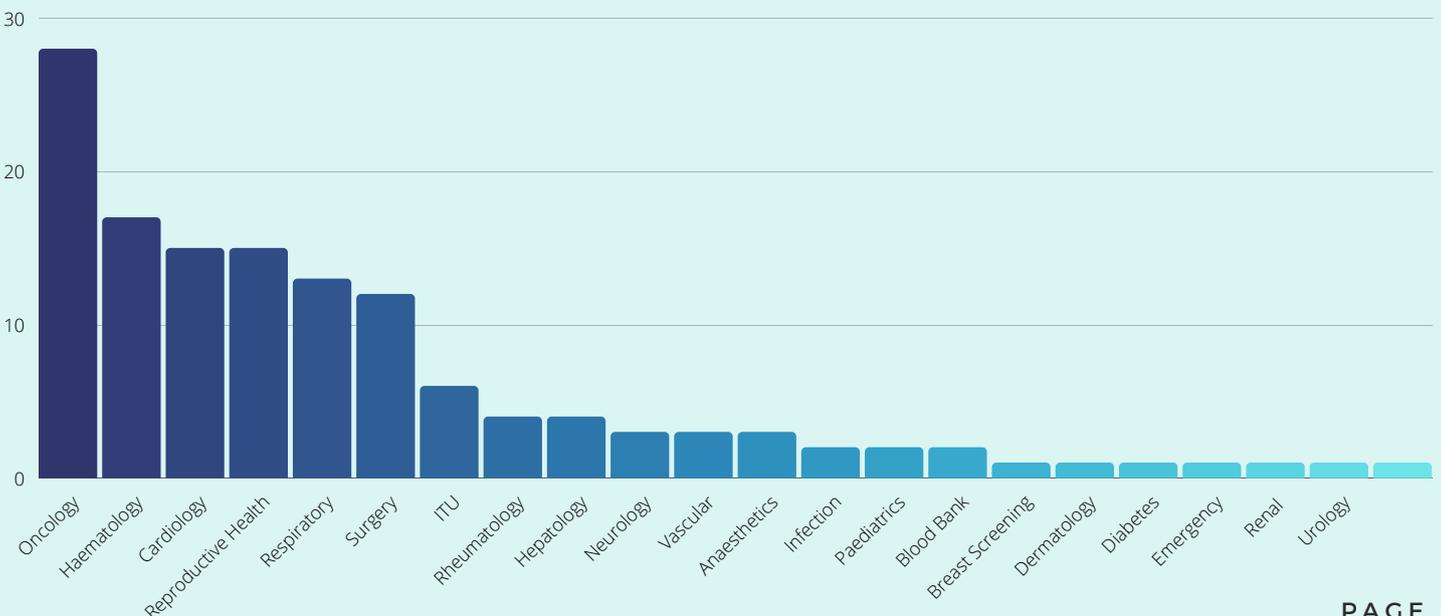
## Increase our research capability:

Together, these actions will

- Increase participation in clinical trials.
- Increase the number of trained principal investigators.
- Increase the number of services in which research is taking place by.

	NOW 2022	BY 2025
Number of specialties	21	25
Number of active studies	121	132
Number of principal Investigators	56	60

## Number of studies by specialty 2022



## AIM 2: INCREASED INCOME AND EFFICIENCY

Research can provide an additional source of income or substantial savings on the costs of treatment. Research is funded by a variety of sources, including NIHR, other governmental bodies such as the Medical Research Council, charities such as the Wellcome Trust and Cancer Research and pharmaceutical, medical technology and biologics industries.

Research which meets certain quality standards will be recognized by adoption onto the NIHR portfolio, and organisations helping to deliver such research will receive support from their local Clinical Research Network.

A recent report produced by KPMG and commissioned by CRN highlights the financial benefits that trusts can expect: For each patient recruited to a commercial trial supported by the NIHR CRN, on average NHS provider in England receives an estimated £9,200 from life sciences companies, and on average saves an estimated £5,800 per patient because trial drugs replaced the standard treatment.

Further financial opportunities need to be exploited so that we can support a stable research team and are able to provide world-class research to patients.

## HOW WILL WE MEASURE SUCCESS

### **Trust finance:**

Regular reports will demonstrate to Trust Board the resulting changes to patient care and potential cost savings across the Trust.

Increased participation in a wider variety of research projects will result in increased potential cost savings, including length of stay, cost of drugs and funding received.

Attracting research interested clinicians will reduce reliance on locums and fill hard to recruit to posts.

### **Digital:**

Making better use of digital resources will increase our visibility as a research active organisation to Sponsors, increasing our study income.

Screening software will improve efficiency of the research team, reducing the 55 hours a week spent on screening.

Digital will support the development of innovative spaces for research to increase study income.

### **Right resources**

Every research team will be cost-neutral, through demonstration of income against expenditure, achieved through the use of study intensity tool, selection of studies and regular skill-mix reviews.

Our workforce plan will have clear progression and improve efficiency through increasing clinical research practitioner and data officer roles. Apprenticeships will be used to support administrative and clinical roles.

Supporting nurses to consent to trials will reduce reliance on medical staffing. Associate PIs and non-PIs will be encouraged to develop our capacity. We will increase commercial activity and use resources flexibly to support this.

Working with our partners as the Consortium, we will continue to make best use of resources through opportunities to share resources and split costs.

We will work with our funders to promote the need for increased funding and resources to have a stable infrastructure.

## AIM 3: EMBEDDING A CULTURE OF RESEARCH AND INNOVATION ACROSS THE TRUST

Clinician participation in research assists with recruitment and retention. There is a national shortage of doctors, nurses and Allied Health Professionals as strong candidates have a wide range of opportunities available. The ability to participate in research is a powerful recruitment incentive. Clinical researchers can support service delivery by undertaking clinics, ward duties and on call commitments alongside their research work.

Regulators such as the Care Quality Commission have begun to take an interest in this area. CQC expect all of the organisations that they inspect to be able to give a good account of their involvement. This currently forms part of the “Well-led” inspection regime in Trusts, and the basic principle that research participation is associated with better care and better patient outcomes is well established in this context.

Currently our biggest recruiting specialties are reproductive health, infection (covid), and oncology.

By implementing this strategy we will:

- widen participation and have increased awareness of Research and Innovation
- all specialties across the Trust will have the opportunity to take part Clinical Research Innovation

## HOW WILL WE MEASURE SUCCESS.

### **Recruit Clinical Research Ambassadors:**

Clinical Research Ambassadors will promote research and innovation cross the Trust, and embed research in their division. This will allow a higher presence of R&I across the Trust, whilst allowing Clinicians to be involved in projects of interest.

### **Creating culture for research**

We will increase the clinicians involved in research through making use of junior doctor and registrar involvement in research, supporting students. We will increase involvement in the associate PI scheme. We will support CNS and AHP involvement to increase patient participation, making best use of resources.

We will work with supporting departments to facilitate their involvement with research.

### **Improve the visibility:**

Improving facilities for the research team will allow interaction with colleagues and patients to increase visibility and participation.

We will explore options to embed the research teams into clinical areas, and make use of secondments into research roles to embed research into clinical practice.

We will present regularly to TME on updates on our strategy and work with divisional and directorate managers to embed a research culture.

We will create a network of research active clinicians to provide peer support.

## AIM 4: ENHANCE OUR REPUTATION AS A RESEARCH ACTIVE ORGANISATION

Participation in Clinical Research can be beneficial to the reputation of a Trust. Being known as an innovative and forward-looking organisation has positive benefits for all staff and our patients are attracted to organisations which can provide access to the most up-to-date treatments.

By enhancing our reputation for research, and working in partnership with other organisations, we will attract more staff to the Trust; in both medical & nursing professions, particularly where there are few qualified professionals and multiple vacancies across the country. This will also give Sponsors greater awareness of our site, increasing the number of studies available to patients.

### HOW WILL WE MEASURE SUCCESS

Implementing digital systems will improve our visibility to commercial sponsors. The Shared Investigator Platform and TriNetX offer opportunities for our Trust to be selected as a site, offering more opportunities for research to patients.

Supporting our charitable partnerships through promotions and communications campaigns will both support our funding and assist with improving our reputation. Working with our research interested clinicians will provide publicity for us a research active organisation.

Communications will work closely with the team to promote and support campaigns, good news stories and success in the research team. External websites will highlight research.

Job adverts and job descriptions, inductions and staff booklets will highlight that we are a research active organisation.

Research will be represented with People and Culture and actively engaged in its campaigns.

Working with our partnerships across the ICS, Foundation Group and the three counties medical school will increase our profile. We will aim to be a centre of best practice and make public our ways of working.

Exploring opportunities for improved facilities will enable publicity of our research active Trust, and create an attractive space for research and innovation.

# IMPLEMENTATION PLAN AND KEY DELIVERABLES

Deliverables	How	By When
Recruit new Clinical Lead for Research and Innovation	Advertising and promoting widely	June 2022
Clinical Research Ambassador role to be developed and recruited to each division	Identifying how post can be remunerated and supported with each division	October 2022
Three clinicians appointed onto the Clinical Trials Scholar programme	Promoting scheme to interested clinicians Supporting those with research interests Development of peer network	March 2025
Increase commercial research activity by one study per year	Identifying and prioritising areas for commercial research Completing expressions of interest Setting up digital systems	March 2025
Increase CRN funding	By working closely with our CRN partners to promote need for investment To support CRN with its Entry Plan and performance objectives to demonstrate need for investment	March 2023
Work with CRN to create flexible workforce in the ICS	Work with CRN to develop flexible resources across Herefordshire and Worcestershire that meet needs of service Submitting regular ACROSS requests to CRN	March 2023
Regular reporting to Trust Management Executive and Trust Board	To have strategy approved and quarterly updates produced and presented	April 2022
Non-Executive Director appointed to Trust Board	To liaise with Trust Board Chair to identify NED with appropriate portfolio	March 2023
Digital identification system implemented	Application for Innovation and Improvement funding Appointment of fixed-term Business Analyst role System linkages supported by Information and Digital	March 2023
Options appraisal for patient recruitment centre / research vehicle developed	Application for Innovation and Improvement funding Working with ICS partners to identify need	March 2023

# IMPLEMENTATION PLAN & KEY DELIVERABLES

<b>Deliverables</b>	<b>How</b>	<b>By When</b>
SLAs and collaboration agreements in place with partners	Promoting SLA service and developing tailored agreements that are mutually beneficial, identifying opportunities for shared resources	March 2024
Increase number of PIs by 1-2 per year	Use of associate PI scheme, development of non-medic PIs. Increased support from junior doctors and CNS in departments to stretch research resources further	March 2025
Network of research active clinicians created	Development of Teams Channel and promotion through divisions, organisation and coordination of events	March 2023
Continued collaboration with Cure Leukaemia and charitable funders	Continue to develop Charity appeals and work with our funders to promote use of funding and impact on patient care	March 2025
Research widely promoted in job adverts, descriptions and induction	Work with People and Culture and Learning and Development to increase awareness of research	March 2023
All studies receive costing assessment such as study intensity tool	Teams will identify cost neutral and share resources to create savings	March 2023
Shared investigator platform set up	Research to work with active clinicians and departments set up on-boarded	March 2023
Skill-mix review completed and workforce plan implemented	Work with research team to identify future needs and skill-gaps making use of CRPs, apprentices and data support	March 2023
Comms produce at bi-monthly good news stories from research	Comms informed and work with research to promote good news stories	March 2023

# PARTNER ORGANISATIONS



The Trust hosts the Herefordshire and Worcestershire Consortium, a partnership across NHS providers and primary care in the ICS.

The Consortium also collaborates across the research ecosystem with the Clinical Research Network West Midlands, University of Worcester, primary care and the AHSN, to identify strategic objectives for the development of research to meet local population needs. Key areas are currently frailty and dementia research.

Together we will look to support Patient Recruitment Centres, a Health Research Workforce and explore ways to work smarter, work collaboratively and embed research.

We were recently successful in receiving funding for four of our projects looking to improve research in our region, which will be completed in the year 2022-2025.

We also host a research management service through a service level agreement with Wye Valley NHS Trust. There is potential to continue to develop this.

The Trust is a partner organisation of the Clinical Research Network West Midlands, which is the largest of the 15 local research networks that cover the geography across England, representing all NHS organisations in the region. It provides NIHR funding and practical support to increase research activity and is the largest provider of funding to the Trust, with approximately £400k allocated each annum, based on research performance in previous years, and bids from strategic funding. As a partner organisation, the Trust collaborates on workstreams, funding proposals and has a link manager.

Academic links are made through the University of Worcester for research into dementia, frailty and nursing and midwifery research. Developing links with clinical trial units and other academic organisations will be crucial for development of research and hosting of NIHR grants. Joint appointments with academic organisations would be one way to do this, and making the most of Early Career Researcher development programmes.

Innovation activities are supported through MidTech through a formal agreement who support protection of Intellectual Property and along with the Academic Health Sciences Network, link clinicians to Industry and other partners.

The Clinical Research and Innovation strategy is one of the building blocks of our Trust vision of putting patients first. Being delivered in accordance with our 4ward signature behaviours will contribute to our strategic objectives of providing the best services for local people, delivered by the best people.



# Appendices

## Appendix 1: SWOT Capabilities

Strengths	Weaknesses	Opportunities	Threats
<p>Largest provider organisation in the STP</p> <p>Three hospitals spanning geographical scope of Worcestershire</p> <p>Engaged and motivated patient populations</p> <p>Strong network of collaborators and partners</p> <p>Passionate research workforce with flexibility to drive research agenda across sites</p> <p>Track record in cardiology, oncology, haematology, respiratory, vascular, surgery and ICU research</p> <p>Islet Laboratory leader in field</p> <p>Excellent record for performance and recruitment to time and target, meeting KPIs</p>	<p>Numerous departments prioritise clinical duties over research activity</p> <p>Research nurse numbers and limited funding constrain supporting additional departments</p> <p>Resources in radiology limit studies requiring additional imaging</p> <p>Lack of Chief Investigators or clinicians with time to develop academic careers</p> <p>Research not routinely discussed at board level</p> <p>Lack of resources and funding to support home-grown research</p>	<p>Large acute Trust with much untapped potential for commercial research</p> <p>Interest from clinicians that with right income and investment could boost research</p> <p>Clinician recruitment could be increased and improved if driven by research and innovation capabilities</p> <p>Digital research service transformation</p> <p>Growing awareness of research through Covid-19, internally and with patients</p> <p>Increase RCF through joint appointments and home-grown academic research</p>	<p>Competition with other NHS Trusts with similar size population have more staff, funding and stronger track record</p> <p>Patient recruitment centres and site management organisations reduce the need for hospital site research</p> <p>Commercial pipelines and charitable funds may be reduced due to Covid-19, limiting growth</p> <p>Future non-COVID NIHR funding could be reduced due to prioritisation of COVID studies</p> <p>Reducing CRN WM funding</p>

# Appendices

## Appendix 2: Commercial research speciality analysis

Speciality	Mid Yorkshire Hospitals	Royal Devon & Exeter	Shrewsbury and Telford	South Tees Hospitals	The Dudley Group	The Royal Wolverhampton	Worcestershire Acute Hospitals
Anaesthesia, Pain Management				248			
Cancer	232	110	26	264	14	212	53
Cardiovascular Disease	87	229	230	672	370	655	554
Children		89		69	2		
Critical Care			7	36			
Dementias and Neurodegeneration		106					
Dermatology	6	52		50	68	59	
Diabetes	11	91		45	66	1	5
Ear, Nose and Throat			1	23			
Gastroenterology	48	88	143	20	18	86	
Haematology						2	
Health Services Research					9		
Hepatology				1			
Infection		7		8			
Metabolic and Endocrine Disorders				14	7	3	
Musculoskeletal Disorders	4	90		46	58	289	
Neurological Disorders	18	73		21			1
Ophthalmology	16	7		32		102	
Primary Care	26			6		3	
Renal Disorders	8	80	16	45		41	
Reproductive Health and Childbirth				6			
Respiratory Disorders	1	85	11	24		11	1
Stroke			9			20	
Surgery	6	7		48		5	1
Trauma and Emergency Care	8	71		20		183	
<b>Grand Total</b>	<b>471</b>	<b>1221</b>	<b>443</b>	<b>1692</b>	<b>618</b>	<b>1672</b>	<b>615</b>

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