Research and Development Plan: 2014-2017





Statements of partner support

The University of Birmingham sees SWBT as a key partner in delivering our translational research agenda. We are continue to strengthen and develop in the delighted that one of our senior clinical academics, Karim Raza, has taken on the role of R and D director as this will strengthen the close ties between us and make sure that our research strategies continued to be aligned. SWBT hosts some of our strongest translational research including world renowned programmes rheumatology and cardiology, in ophthalmology, oncology and Parkinson's disease. The University prides itself on a strong research base but this means little without the ability to translate discovery science into the clinic, a step which requires highly trained clinician scientists with access to patients. SWBT provides both of these and by working closely with senior leaders in the Trust we have ensured that our efforts are coordinated to deliver the maximum impact for patients and the local community. The development of the

Midlands Met Hospital will provide exciting new opportunities for the partnerships to future. We are also extremely proud of the high quality education delivered to our medical students by members of the SWBT Teaching Academy at SWBT, this is helping us to train and deliver the clinical researchers of the future.



Professor David Adams Pro-Vice-Chancellor, University of Birmingham

The 2014-17 Plan: Main deliverables:

Objective: To increase the number of patients recruited to clinical studies adopted onto the National Institute for Health Research (NIHR) portfolio from ca 2,000 patients per year to 6,000 patients per year by April 2017. Delivery deadline: April 2017 Expert lead: Prof Karim Raza Responsible Board member: Dr Roger Stedman	Objective 6
Objective: To increase the internationally recognised excellence of our research portfolio.	

- Specifically we will develop an additional two areas of research excellence.
- Delivery deadline: April 2016 (for 1st area) and April 2017 (for 2nd area)
- Expert lead: Prof Karim Raza

Objective 1

Objective 2

Objective 3

Objective 4

Responsible Board member: Rachel Barlow

Objective: To increase the breadth of our clinical research portfolio. Specifically we will develop a new research portfolio in at least five disease areas where research activity was absent / modest between 2011 -2014.

Delivery deadline: April 2015 (for 1st area), April 2016 (for 2nd and 3rd areas), April 2017 (for 4th and 5th areas).

Expert lead: Prof Karim Raza

Responsible Board member: Dr Roger Stedman

Objective: To increase the range of health care professionals contributing to our clinical research portfolio. Specifically we will promote the involvement of Nurses and Allied Health Professionals (AHPs) in research, ensuring that at least three NIHR portfolio adopted studies are led at SWBH by Nurses / AHPs.

- Delivery deadline: April 2016 (for 1st and 2nd studies), April 2017 (for 3rd study).
- Expert lead: Prof Karim Raza

Delivery deadline: August 2016

Expert lead: Prof Karim Raza

Responsible Board member: Colin Ovington

Objective: To translate research into better and safer clinical care. Specifically we will work with the CLAHRC-WM (Collaborations for Leadership in Applied Health Research West Midlands) to develop innovative ways of implementing evidence based health care in at least new three domains.

Responsible Board member: Rachel Barlow

Objective 5

will develop our links with our partner Universities to develop at least two new joint positions to support Objective 2 (Promoting internationally recognised excellence in clinical research). Delivery deadline: August 2015 (1st appointment) and August 2016 (2nd appointment). Expert lead: Prof Karim Raza

Objective: To align R&D with the strategic aims of our academic partner organisations. Specifically we

Objective: To align R&D with the Trust's vision of being renowned as the best integrated care organisation in

the NHS. Specifically we will develop a new forum with representation from primary and secondary care within

which we can develop a strategy for research at the

primary / secondary care interface.

Delivery deadline: April 2015

Dr Paramjit Gill and Dr Roger Stedman

Expert lead: Steve Clarke **Responsible Board member:**

Responsible Board member: Toby Lewis

Objective 7

Objective 8

Objective 9

Objective: To make patients aware of R&D and empower them to influence it. Specifically we will: (i) Develop a consistent approach to the branding of the Trust's R&D activities. (ii) Develop the R&D website and the effective use of social media. (iii) Expose patients to R&D from the time of their initial contact with the organisation with a focus on electronic check in desks with 70% of all outpatients being asked if they would be interested in taking part in research. (iv) Ensure patient representation in decision making processes via patient representation on the R&D committee.

Delivery deadline: Income target of £500,000 (April 2015), £700,000 (April 2016) and £1,000,000 (April 2017).

Expert lead: Dr Jocelyn Bell

Responsible Board member: Dr Roger Stedman

Objective: To ensuring rigorous governance processes and necessary infrastructure. Specifically (i) The Research Management team will ensure that all research studies are reviewed and set up in accordance with national time lines and delivery of studies is performance managed to ensure adherence to national recommendations. (ii) We will have increased annual income generated from commercial research and though IP management from £400,000 to £1.000.000. Delivery deadline: August 2015 for all objectives

Expert lead: Prof Karim Raza

Responsible Board member: Ruth Wilkin

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Expert contributors - Why does it matter?



Research is important because our patients deserve to be treated in an organisation that is moving the frontiers of medicine and healthcare.

> Dr Roger Stedman, Medical Director

Improving the quantity, quality and impact of clinical research is important – our patients want it and the NHS needs it. In achieving this we will help increase the standards of the care provided to patients at our Trust and more widely across the NHS. **Professor Karim Raza** Director of Research & Development





I strive to deliver a beacon of excellence specifically in regards to public health and reducing the inequalities gap for children, young people their families and the communities in which they live.

> **Dr Paramjit Gill** Non-Executive Director

Research underpins all clinical care, demonstrating learning from evidence and promoting innovative practice for the benefit of patients.

> **Dr Jocelyn Bell** Head of Research & Development



1. Why Research and Development matters

Research is integral to our ambition to continually improve the safety and quality of the care we provide to our patients. A strong culture of research at Sandwell and West Birmingham Hospitals matters to us because:

- It matters to our patients. Extensive research has shown that patients believe it is important for the NHS to carry out clinical research with the vast majority wanting to be treated in a hospital where research takes place.
- It allows us develop and deliver more effective ways of looking after our patients.
- It matters to our staff. Encouraging and facilitating our clinical staff to ask questions, to develop research strategies to address them and to contribute to local, regional, national and international research studies will allow our healthcare workforce to develop to its full potential. A culture of research in any NHS organisation empowers its staff to think critically and facilitates innovation.
- It allows for income generation through innovation to support the

development of research capability and the translation of research findings into improvements in patient care.

It matters to the NHS. The ٠ Government is committed to the promotion and conduct of research as a core NHS role, recognising that this is an integral component of its strategy to "improve the health and wealth of the nation".

In becoming an organisation recognised as delivering the highest guality health research, and in developing our unique R&D portfolio, we will:

- Meet our patients' expectations that • they are cared for in an environment where research is at the centre of improving the safety and guality of their healthcare.
- Attract patients who want to be looked after in such an environment.
- Attract the highest calibre of staff to work in our organisation.
- Attract investment from commercial and non-commercial organisations to underpin growth and development.



2. How this fits with our strategic objectives - a priority

Delivering safe high quality care is at the centre of everything we do. Making care safer and of higher quality is the critical objective of the research we undertake and is why the R&D plan is so important.

There some areas in which research at SWBH is already of the highest standard and where our work has influenced approaches to disease management at both national and international levels. We want to grow those areas. But we also want to increase the breadth of our research, empowering the full spectrum of health care staff to deliver research and to give all our patients the opportunity to take part in research. In doing, so we will make ourselves truly responsive to our patients' needs.

The Trust serves a large and ethnically mixed population and has excellent links into the community, where the care of many patients with chronic longer term condition is increasing focussed. This population and these links put us in a privileged position to develop a diverse and innovative research programme.

High quality research requires considerable resource. We already have the two most important

elements of that resource– committed and enthusiastic staff and patients who are keen to work with us. We will continue to develop our resource recognising that the success of R&D plan will be facilitated by the success of all the Trust's plan, for example the IT plan. To deliver to our full potential we will, however, need to engage more actively and strategically with our partner organisations.

The Universities in the West Midlands are some of the best in the country and our local enterprise are some of the most innovative. We will develop our links with them, ensuring that our plan complements that of important local and regional initiatives such as the Institute for Translational Medicine, under the direction of Birmingham Health Partners, and the West Midlands Academic Health Sciences Network.

We begin from a strong position. Three years is not long but it is long enough to position ourselves as an organisation with a unique focus which delivers outstanding clinical research and contributes as a critical stakeholder to translational biomedical research in the West Midlands.

Our strategic objectives

Safe, High Quality Care	Accessible and Responsive	Care Closer to Home	Good use of resources	21st Century Infastructure	An effective organisation
We will provide the highest quality clinical care. We will achieve the goals for safety, clinical effectiveness and patient experience set out in our quality strategy Rationale: This is the minimum patients are entitled to and come to expect	We will provide services that are quick and convenient to use and responsive to individual needs. They will be accessible to all ages and demographics. Patients will be fully involved in their design Rationale: Our market assessment shows that we need to make services more accessible and responsive to meet the demands of our patients and commissioners and to maintain our position. Services that meet the needs of individual patients are likely to result in improved health outcomes	Working in partnership with primary and social care we will deliver an increasing range of seamless and integrated services across hospital and community settings Rationale: We need to provide a wider range of community based treatment and prevention services to ensure a sustainable health economy and to help achieve our objective to build a new, smaller hospital	We will make good use of public money. On a set of key measures we will be among the most efficient Trusts of our size and type Rationale: Funding constraints mean that we have to increase our efficiency very considerably	We will ensure our services are provided from buildings fit for 2 1st Century health care Rationale: A significant proportion of our estate is sub optimal. Areas of the estate do not fully meet patient needs and expectations and does not support an effective use of workforce	An engaged and effective NHS organisation will underpin all we do We will become a Foundation Trust at the earliest opportunity. We will develop our workforce, promote education, training and research, and make good use of technologies We will make the most effective use of technology to drive improvements in quality and efficiency Rationale: Effective governance and excellent staff engagement is at the heart of a successful organisation. Becoming a Foundation Trust will help achieve these aims

3. Current excellence in Clinical Research at Sandwell and West Birmingham Hospitals NHS Trust

The Trust has a long and proud track record of excellence in clinical research. The following examples give a flavour of our ability to attract significant research grant funding, and to develop new products and approaches to clinical management that have improved the quality of life of many of our patients.

Our Cardiologists have developed risk scores for stroke (CHA2DS2-VASc) and bleeding (HAS-BLED) specifically for use in atrial fibrillation, providing clinicians with simple tools to assess stroke and bleeding risk and allowing them to identify and counsel patients, thereby improving clinical practice and patient safety. This, amongst other achievements, led to the 'BMJ Group Cardiovascular Team of the Year' award in 2013. These 2 risk scores are recommended within the 2014 NICE guidelines for atrial fibrillation.

Our Rheumatologists have been awarded the Arthritis Research UK Centre of Excellence in the Pathogenesis of Rheumatoid Arthritis (RA), and lead a European Union consortium funded at €.7M to develop strategies to predict and prevent the development of RA in those at risk. They have identified that the earliest phase of joint inflammation in those destined to develop RA is characterized by a distinct pattern of inflammation, a finding which has significant implications for the approaches to the treatment of early disease.

Our Neurologists have recently published, in The Lancet, the largest drug study in Parkinson's disease ever conducted. It shows that levodopa therapy leads to better patient-rated quality of life than dopamine agonists and MAOB inhibitors and will lead to changes in clinical practice at an international level.

Our Ophthalmologists have been developing a synthetic flowable dressing to prevent scarring of the cornea, currently a leading cause of worldwide blindness, and a tool to measure conjunctival scarring. In addition they have made important discoveries regarding the roles that cell of the immune system play in conditions causing inflammation at the front and the back of the eye. Excellence in these areas was central to SWBH being awarded the status of National Centre of Excellence for Beçhet's Disease.

Our Gynaecological Oncologists have developed new approaches to diagnostic testing in patients with gynaecological cancer and have been commissioned by the National Institute for Health and Care Excellence to develop and deliver a study to investigate approaches to the treatment of ovarian cancer.

4. The 2014-17 Plan: Main deliverables - now and then

OBJECTIVE 1: Increasing clinical research activity

Now	2017
In 2013-14, 2,071 patients were recruited from SWBH into clinical studies on the NIHR (National Institute for Health Research) research portfolio	 The central objective of the R&D plan is to bring about an increase in recruitment achieving 6,000 patients recruited to NIHR portfolio adopted studies by April 2017. The increase will be incremental as follows: 2,500 patients in year 2014-15, 4,000 patients in year 2015-16 and 6,000 patients per year by April 2017. This step change in recruitment will be facilitated by achieving the objectives 2 – 9.

OBJECTIVE 2:

Promoting national and international excellence and leadership in clinical research

Now	2017
 Researchers at SWBH lead internationally recognised research programmes in several disease areas including: Atrial fibrillation Gynaecological malignancies Inflammatory eye disease Parkinson's disease Rheumatoid arthritis Systemic lupus erythematosus 	 We will continue to support and develop our areas of research excellence. We will expand our portfolio of research by developing at least two disease areas in which we are national / international leaders. Potential disease areas where we currently have considerable clinical strength and an existing research portfolio which could be developed further include: Behçet's disease
 Research carried out at SWBH has: Led to significant advances in our understanding of disease mechanisms. Enhanced our ability to predict, prevent and treat common diseases associated with major health burdens. Informed national and international guidelines on disease management. 	 Gastroenterological diseases / GI surgical diseases Research excellence and leadership will be evidenced by: Publication of original data in at least four peer reviewed publications in speciality or general medical / surgical journals Ability to attract grant income as evidenced by the award of at least one grant from an NIHR partner organisation Invitation to present data at a national /

international meeting

Current excellence in Clinical Research

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OBJECTIVE 3

Increasing the breadth of our clinical research portfolio

Now	2017	Now	2017
Our research portfolio has breadth as well as depth. In addition to disease areas where we are recognised as leaders in the field, we actively contribute to nationally and internationally recognised research across all clinical directorates with active research programmes in areas including: Dermatology Diabetes Gastroenterology Haematology Metabolic medicine	 It is our vision that all patients looked after at the Trust are given the opportunity to take part in clinical research. We will have raised the profile of research amongst Trust staff using a number of strategies including: Regular promotion of R&D activity in Trust publications including Heartbeat and Innovation and via Social media including Twitter 	The National Institute for Health and Clinical Excellence works to facilitate the implementation of evidence based healthcare throughout the NHS and Governance systems at the Trust ensure that guidelines are integrated into clinical care. We have worked with CLAHRC-WM (Collaborations for Leadership in Applied Health Research – West Midlands) to improve the quality of care we provide in relation to our Readmissions project and our 10 out of 10 safety in healthcare project	In addition to our current approaches, we will continue to work with the CLAHRC-WM to institute changes in clinical practice at the Trust in at least 3 clinical domains. This will improve the quality and safety of the care that we provide to our patients.
 Oncology Paediatrics Reproductive health Stroke 	We will have worked with clinical groups to develop research in areas of currently limited activity. Specifically we will have developed a new research portfolio in at least five disease	OBJECTIVE 6: Translating research into better and s	afer clinical care
JUOKE	areas where research activity was absent / modest between 2011 -2014.	Now	2017
	 For areas where research activity was previously absent we will aim to recruit on average 50 patients per year to portfolio adopted studies. For areas where research activity was previously modest (on average less than 50 patients recruited per year), we will aim to treble annual recruitment to portfolio adopted studies. 	Several of our current research themes align with the Trust's objective of delivering 'care closer to home' through an integrated service across hospital, intermediate care and community settings.	The Trust's vision is to be renowned as the best integrated care organisation in the NHS provides an ideal environment within which to strengthen a research programme operating at the interface between secondary care and, for example, primary care and social care. Research themes operating at these interfaces will be supported through close engagement between researchers at the Trust and local
OBJECTIVE 4: Increasing the range of health care	professionals contributing to our		partner groupings and organisations.
clinical research portfolio			We will have developed a new forum with representation from primary and secondary care within we can develop strategy for research at
Now	2017		the primary / secondary care interface.
Our research portfolio is led predominantly b doctors. There are however several examples Nurses and Allied Health Professionals (AHPs conducting research as part of educational projects e.g. MSc projects and PhD training Fellowships.	of by Nurses and Allied Health Professionals		 We will host research programmes to: Understand the earliest phases of disease and to facilitate appropriate referral to secondary care. Develop strategies for integrated care for patients with long term conditions including diabetes, heart failure and arthritis.

OBJECTIVE 5:

Aligning with the Trust's strategy

4. The 2014-17 Plan: Main deliverables - now and then

OBJECTIVE 7:

Now

Aligning with the strategic aims of our academic partner organisations

2017

Many researchers at SWBH have very close links with local academic organisations, in particular the University of Birmingham and Aston University. The Trust currently hosts sixteen Clinical Professors in:

- Ophthalmology (5)
- Rheumatology (3)
- Cardiology (2)
- Pharmacology and Toxicology (2)
- Obstetrics and Gynaecology (2)
- Neurology (1)
- Metabolic Medicine (1)

These links have enabled the development of outstanding translational research programmes capitalising on the clinical strengths of SWBH and the scientific strength of its associated universities. We will continue to support our longstanding and highly successful academic links with the University of Birmingham and Aston University. The establishment of the West Midlands Academic Health Sciences Network (AHSN) in 2013 brings together providers of NHS services, with academia and industry at a regional level increasing our ability to interact with relevant partners organisations through a focus on priorities and themes of the West Midlands AHSN, including:

- Long Term Conditions
- Digital Care
- Integrated Health

Specifically we will have developed our links with our local academic partner organistions by developing at least two new joint positions to support Aim 2 (Promoting national and international excellence in clinical research).

OBJECTIVE 8:

Making patients aware of R&D and empowering them to influence it

Now

2017

We carry out our research to benefit our patients and can only do our research with our patients' support.

Many of our research groups actively involve patients in the development, delivery and dissemination of research and individual examples of excellence in Patient and Public Involvement have been recognised at a national level. We will increase the visibility of R&D and the research opportunities within it so patients are aware of studies they may be able to participate in.

We will have developed:

- A consistent approach to the branding of the Trust's R&D activities
- A strategy to exposing patients to R&D from the time of their initial contact with the organisation with a focus on electronic check-in desks. Through this we will develop a database of patients interested in taking party in research studies.
- Our R&D website and the effective use of social media
- We will have involved patient representatives in decision making processes, allowing the patient voice to help shape the direction of R&D and approaches to its delivery. In particular we will work with the Trust's 'patient panels' to ensure patient representation on the R&D committee.

OBJECTIVE 9:

Ensuring rigorous governance processes and necessary infrastructure

2017

Now

4. The 2014-17 Plan: Main deliverables - now and then

R&D activities at the Trust are supported by a Research Management and Governance team, and dedicated Research Nurses, Clinical Trials Practitioners and Data Coordinators. These teams work to ensure that approvals for clinical studies take place in a timely fashion and that the research process follows appropriate governance standards.

We will continue to ensure that our research is carried out to conform to the requirements of the Research Governance Framework and the highest standards of Good Clinical Practice and that we meet the delivery requirements of the National Institute for Health Research.

We will ensure that changing requirements of research governance and management including those introduced by the Health Research Authority and the EU (e.g. the new regulations for Clinical Trials) are integrated into our working systems in an efficient and transparent manner.

The Research Management team will ensure that research studies are reviewed and set up in accordance with national time lines and delivery of studies is performance managed to ensure adherence to national recommendations.

The development of our R&D portfolio will be supported by an expansion in core members of the Research Management and Governance team and the Research Delivery team.

This will be facilitated by income generated through:

- Increased NIHR portfolio research
- Increased commercial research
- The effective management of intellectual property generated by researchers at the Trust
- Specifically we will increase the annual income which supports R&D, and that is generated from research grants, commercial research and IP management, from £400,000 to £1,000,000.

5. Governing the plan:

The Trust is structured across seven clinical groups, supported by seven corporate directorates. Each of those, and the clinical directorates beneath them, are led by clinicians and professional managers. For this plan to be delivered, the subject experts who have contributed ideas to this campaign will be joined by the people who manage and delivery services across the Trust.

The Research and Development Committee: Chaired by Dr Roger Stedman, Medical Director The Director of R&D, Head of

R&D, Director of R&D, Head of R&D, Director of Governance and representatives of all Clinical Groups sit on this committee which meets every two months to review R&D activity against Key Performance Indicators within the R&D Plan. Data on the numbers of patients recruited to studies and income generation are carefully scrutinised and corrective action taken where necessary.

The Investigators' Forum: Chaired by Prof Karim Raza, Director of R&D

This group meets every three months to update Principal Investigators on performance in relation to the R&D plan, share best practice, understand problems at a 'grass roots' level and identify solutions. Sandwell and West Birmingham Hospitals





SWBH Research & Development Plan