## Contents

1 Foreword 4
2 Vision: Research for all 4
3 Mission 4
4 National drivers 4
5 Local drivers 5
   5.1 Quality
   5.2 Performance
   5.3 Staffing
   5.4 Finance
   5.5 STPs
   5.6 Estates
6 Achieving our Mission 7
7 Our Goals 7
   7.1 Public, patients and staff
   7.2 Workforce
   7.3 Partnerships
   7.4 Organisational
   7.5 Summary of Goals
8 Delivering the strategy 14
   8.1 Strategic plan for research
   8.2 Performance framework
   8.3 Funding
   8.4 Review
9 Resources 19
   9.1 For patients, public and staff and researchers
   9.2 Research design and grant application support
Appendices 20
Glossary 23
The NIHR's vision is "...to improve the health and wealth of the nation through research." It's mission is "...to provide a health research system in which the NHS supports outstanding individuals working in world-class facilities, conducting leading-edge research focused on the needs of patients and the public." NIHR has radically transformed the funding mechanisms for health research in NHS Trusts moving from historical block funding to directed and commissioned research programmes and infrastructure initiatives including Clinical Research Facilities (CRFs), Experimental Cancer Medicine Centres (ECMCs), Biomedical Research Centres (BRCs) and Collaborations for Leadership in Applied Health Research and Care (CLAHRCs). Research active NHS Trusts also receive funding via NIHR Clinical Research Networks (CRNs) based on the number (and complexity) of patients recruited to research studies. The changes in funding have encouraged and facilitated academics and NHS researchers to work closely together in larger multi-disciplinary teams. This integration and focus has attracted additional funding from the Government and other non-governmental funders. The need to invest in developing the next generation of researchers has resulted in a number of initiatives to provide opportunities to prepare both medical and non-medical professionals to undertake and lead research. NIHR's central role in England's health and care research landscape is complimented and supported by others who have an overarching aim to strengthen health and life sciences research in the UK such as the Medical Research Council. The government's Research Councils invest around £3 billion in research each year, covering the full spectrum of academic disciplines from the medical and biological sciences. The NHS itself is committed, through the NHS Constitution, to the promotion, conduct and use of research to improve the current and future health and care of the population. NHS England has a legal duty to promote research and the use of research evidence in the NHS and in April 2017, published plans setting out its strategic approach to research. Similarly, DH has several Arm's Length Bodies (ALBs), such as NHS England, Public Health England, Health Education England and regulatory bodies, each with specific responsibilities that relate to health, public health and social care research. Central to its ambition of accelerated pull-through of innovation and NHS-academic collaboration with industry partners are the 15 Academic Health Science Networks (AHSNs) across England. Established in 2013 they aim to provide a focus and support to regional acceleration and spread of innovative, evidence-based care to improve health and care quality. A continuing national priority; The UK Government's January 2017 green paper on a modern industrial strategy for better living standards and productivity identifies ten pillars of growth, the first of which is science, research and innovation. This resonates with the 2011 Strategy for the UK life sciences industry produced by the Government's Office for Life Sciences, stating the ambition that the UK will become the global hub for life sciences research in the future and a key contributor to sustained economic growth. Much of this strategic intent is developed through the independent Office for Strategic Coordination of Health Research (OSCHR), of which UHS FT CEO Fiona Dalton is a member. This body works across the full range of national governments, relevant government departments, and health and care research funders to address the barriers to research collaboration and to support the application and translation of research into patient care and economic benefit. 5.1 Quality There are around 1000 research studies being conducted across the Trust at any given time. Each research study is an opportunity for patients and staff to access information, advice and care, sometimes lifesaving, which might not otherwise be available. Studies themselves are run to quality and safety standards specific to research and contribute to the over high standards of patient safety at UHS. Feedback for research participants is highly positive: “I feel so great knowing now I'm doing something that maybe somewhere, someday can save someone's life” Respiratory research participant 5.2 Performance There is a widely held view that being research active enhances the performance of NHS organisations, and the evidence to support this view is increasing. Of note are three papers which looked at HSMR and academic output, risk-adjusted mortality and research activity, and the effect of engagement of clinicians and organisations in research on healthcare performance. Key conclusions from those papers are provided below. HSMR – “significant correlation between academic output and mortality rates.” Bennett W, Bird J, Burrows S, et al. 2012 “Research active Trusts had lower risk-adjusted mortality for acute admissions, which persisted after adjustment for staffing and other structural factors.” Ozdemir BA, Karthikesalingam A, Sinha S, et al. 2015 “Organisations in which the research function is fully integrated into the organisational structure can out-perform other organisations that pay less heed to research and its outputs.” Boaz A, Hanney S, Jones T, Soper B 2015.
It is reasonable to assume that the impact reported in the literature is reproduced at UHS and thus being research active makes a significant contribution to the high performance seen across the Trust.

5.3 Staffing

A main contributory factor for the improved performed in research active Trusts is the workforce.

Boaz and Hanney et al summarise the key attributes relating to staff observed in successful organisations:

- Research active organisations attract high quality staff
- Research engagement promotes changes in attitudes and behaviour that positively impact the delivery of clinical care
- Research-active staff may differ from their peers in non-research-active settings because of: personal characteristics, multidisciplinary collaboration, additional training and education or specialisation
- Applying the processes and protocols developed in a specific study (not counting any impact from regimens in the intervention arm) to all patients with specific illness, irrespective of their involvement in the trial
- Centres within networks build up a record of implementing research findings
- Network membership increases the likelihood of physicians recommending guideline concordant treatment
- Use of the infrastructure created to support trials more widely, or for a longer period, to improve patient care

5.4 Finance

All UHS income for R&D is externally generated through competitive awards for excellence and volume of research performed. R&D income is distributed throughout the Trust to fund research activities that enhance clinical care.

As well as income, research generates savings. Based on a recently published KPMG report, 2016/17 commercial recruitment at UHS will result in £3.75m savings to Trust. Similar savings will have been made in previous years and will continue to be realised in future. It is recognised that there are other significant savings which arise from the indirect benefits of being research active which are not possible to quantify.

5.5 STPs

The research priorities of our major infrastructure units focus on the health challenges facing the UK (e.g. obesity, ageing and dementia, cancer, respiratory disease) and are therefore closely aligned to the priorities of the STP. Our research is already informing changes in clinical services (e.g. prehabilitation in the Wessex Cancer Alliance).

5.6 Estates

Being a research active enables the Trust-University partnership to access capital funding ring-fenced for research.

Over the past 10 years, over £100m of external funding has been secured to enhance the UHS estate, including:

- Southampton Centre for Biomedical Research (£10m)
- Clinical Research Facility (£3.7m)
- Somers Cancer Research Building (£5m)
- Institute of Developmental Sciences (£10m)
- Wessex Integrated Science Hub laboratory (£1.45m)
- LifeLab (£1.1m)
- Cancer Immunology Centre (£25m)
- MRC Lifecourse Epidemiology Unit (£10m)
- Health Sciences Research Facility (£1m)

6 Achieving our Mission

The mission of the UHS research strategy is to embed research in all of our clinical services.

Our University of Southampton (UoS) research partnership places us in a strong position to achieve this. A high performing partnership with a number of our clinical services having established academic expertise and substantial portfolios of world leading clinical research (Appendix 1 and 2).

We recognise the importance of research to clinical care in services with less well established research programmes and value the contribution of clinicians in developing those portfolios. We understand the potential for clinical research to link our services to local and regional partners and support health system change across the full care pathway.

We aim to support staff to realise the research potential in their clinical areas. In doing so, we will constantly improve clinical outcomes, the standard of care for patients and the health wellbeing of staff, fully contributing to a Learning Health System.

In achieving our mission, we will:

1. Work with our partners to further develop our areas of clinical academic excellence and world leading research for patient benefit
2. Support UHS staff and develop the research culture to engage in the Trust’s research agenda through:
   2.1 Delivering high quality collaborative research programmes within their clinical services
   2.2 Enabling a team approach to research delivery
   2.3 Referring patients to participate in research led by colleagues

7 Our Goals

7.1 Public, patients and staff

Our research could not happen without all the people who offer their time and commitment to shape and take part in our research studies and clinical trials.

The public have a right to have a say in what and how research is undertaken at UHS. We know that being involved in research can lead to people who use our services feeling more empowered, providing a route to influencing change and improving issues which concern them most. Patients and members of the public have personal knowledge and experience of our research areas and bring a different and important perspective. The public support research and are keen to participate when asked. Working in partnership with the public and our patients will ensure that our research is high quality and relevant.

We will be a founding partner of the Wessex Patient Involvement Network (PIN), established to deliver on the recommendations for public involvement in research identified in the NIHR ‘Going the Extra Mile’ publication. We will share expertise, experience, learning opportunities, resources, strategies and policies to further develop our public
involvement activities. We will increase opportunities for patients and the public to co-produce research in partnership with researchers, identify and inform research priorities and improve research delivery, dissemination and implementation. Our public engagement activities will shape our strategic plan, promoting positive perceptions and constructive engagement. We will raise the profile of Southampton as a world class research-led hospital. We will make the full range of opportunities for patients and staff to engage in research clearly visible, including how to participate in relevant studies. We will ensure people feel able to make informed choices on research participation and promote broad engagement to foster discussion, advocacy and consultation on long term research approaches and subject areas.

As one of ten organisations selected by NHS England to trial and evaluate new projects to improve the health of NHS staff, UHS is committed to supporting our staff to be as healthy as possible. In partnership with the UoS we conduct world-renowned research demonstrating how lifestyle and behaviours not only impact on an individual’s health, but that of future generations.

In addition, we are a National Centre of Excellence for work related musculoskeletal illness. Building on these strengths, we will create opportunities for our staff to participate in research which is directly relevant to health promotion and active living. Our work will benefit our staff and accelerate the translation of research for the wider population.

4. For recruitment of research participants to CRN portfolio studies, to be in the top:
   5 NHS Trusts for interventional studies
   10 NHS Trusts for all studies

5. By 2022 achieve a 50% increase in early-phase experimental medicine research activity

6. Achieve an annual increase in the percentage of UHS patients participating in research studies

7. Develop mechanisms to record staff participation in research by 2018, determine realistic goal to increase and achieve by 2022

7.2 Workforce

Research is a core role of the NHS and part of good patient care. We will mobilise knowledge within our workforce, such that clinical need informs research and research informs clinical service as part of a Learning Health System.

We will support our staff to lead on and participate in research studies that address clinical need, focussed on enhancing opportunities for funding from the NIHR and other funders of clinical research including UK Research Councils and Association of Medical Research Charities (AMRC).

We want clinicians to consider every patient’s suitability to take part in research as part of their care, and will actively support staff to achieve this aim. We will encourage staff to assume roles on research committees such as NIHR panels, funding boards and advisory groups.

We need to invest in our workforce to ensure our staff have the skills and confidence to engage in research at the level appropriate to them. We need to invest in our leaders and future leaders of research.

We need to equip clinical and non-clinical staff with research know-how relevant to their roles and empower them to use that knowledge to ensure every patient is offered the opportunity to participate in research.

The Southampton Academy of Research (SoAR) works to ensure the education, training and career development of our research workforce. Our aim in establishing SoAR is to nurture the potential of our research workforce to drive the next generation of clinical discoveries, enabling them to advance knowledge and improve healthcare.

We will invest in SoAR to facilitate growth in our thriving clinical research community. We aim to attract the brightest trainees and enable staff to build and sustain research-related careers. Will prepare them to work in and work with different settings (e.g. NHS, HEI, industry, charity).

We will be leaders nationally and internationally in having a highly effective training and education research development partnership, underpinned by comprehensive and effective training schemes that can be adapted to all and ensure the quality of our Trust and University as great places to work, learn and collaborate is clear.

Goals:

1. Increase the number of Principal and Chief Investigators by 50% and 20% respectively by 2022

2. For 3% of NIHR CRN portfolio studies to be led by UHS/UoS Chief Investigators

3. Increase by >25% the number of UHS staff included in the Research Excellence Framework in 2021

4. By 2022, increase the number of UoS/UHS Honorary Associate Professors and Professors by 20%

5. Secure 8 NIHR Senior Investigator awards by 2022

6. Double the number of NIHR and other relevant doctoral, post-doctoral and senior fellowships across the professions by 2022

Figure 1: Southampton Academy of Research

Link and collaborate across boundaries

Build learning & development opportunities & research skills

Support co-production of research & implementation for patient benefit

Value and develop team science

Develop training systems & infrastructure

Research workforce capacity development

Current & future

All career stages

Healthcare professionals, scientific, research managers, basic translational & research translation

Individual, teams, programmes, partnerships

Figure 1: Southampton Academy of Research
7.3 Partnerships

In order to realise our vision, we need to have strong and effective partnerships (Appendix 2). These partnerships will enable us to enhance our research portfolio for patient benefit through working across organisational boundaries, realising opportunities to access a broader range of resources and expertise and providing us with a competitive advantage.

Our primary research partner, the University of Southampton (UoS) is one of the UK’s leading teaching and research universities, ranked in the top 15 in the UK. Working together as the Southampton Clinical Research Partnership, we are better able to meet the strategic aims of both organisations and drive improvements in the health and wealth of our patients and the wider public.

Over the next 5 years, we will increase our combined capacity with the Faculties of Medicine, Health Sciences, Biological Sciences, Engineering and Computer Sciences, jointly securing funding from NIHR and other major funders of healthcare research.

We will build a stronger alliance with the UoS Institute of Life Sciences (IllS) and Network for Antimicrobial Resistance and Infection Prevention (NAMRIP), increasing opportunities for collaboration across the Trust and University and with industry, locally and globally (e.g. FortisNet).

We will develop strategies to increase integration of basic mechanism discovery through experimental medicine with a deeper understanding of disease states that may share common underpinning processes. This will not only help in driving clinical understanding but also, potentially, in the repurposing of already used medicines.

Working with the global pharma and medical device companies, we have successful contract commercial research portfolios in a number of clinical areas. We aim to grow this aspect of our device companies, we have successful contract working with the global pharma and medical organisations in Wessex, including the CRN, a key partner in research delivery, the Academic Health Science Network (AHSN) and Strategic Transformation Plans (STPs).

Through increasing membership of networks and building relationships with international research organisations such as US National Institutes of Health, we will create new opportunities to collaborate and enhance our research portfolios.

Regionally, Wessex has over 10% of its workforce and over 250 life sciences companies in the medtech, industrial biotech and pharma fields. Our expertise and facilities can offer competitive advantage to this ecosystem that can result in reciprocal benefit to UHS in terms of research output, reputation, financial incentives and, most importantly, improved patient care.

Our position within the local life sciences infrastructure will be as a hub of research innovation; fostering cutting edge discoveries, supporting research validation and delivering future benefits to patients and the wider health systems. In particular, we will look to support local SMEs in their underpinned research to support commercial innovation. We will focus this initiative in our core clinical academic strengths supported by our excellent facilities.

UHS is a key partner in the Solent Acute Alliance and engaged in Local Delivery Systems forming part of the overarching STP. The new emphasis on system working provides the opportunity for us and local partners to explore research opportunities and delivery in a broader system context. We recognise the challenges faced by the health service, the need for research to promote healthy ageing and support decision making about clinical services.

We will work with our partners to become more effective through the research and implementation pathway. We will seek to increase our meaningful partnerships with NHS organisations in Wessex, including the CRN, a key partner in research delivery, the Academic Health Science Network (AHSN) and Strategic Transformation Plans (STPs).

Through increasing membership of networks and building relationships with international research organisations such as US National Institutes of Health, we will create new opportunities to collaborate and enhance our research portfolios.

Goals:

1. By 2022, increase the combined, UHS R&D, UoS Faculties of Medicine and Health Sciences annual research income by 30%.
2. Grant funding leveraged by the NIHR Southampton infrastructure to be at least 8 fold increase on NIHR core infrastructure funding by 2022.
3. Deliver 1 major capital project in partnership with the UoS within 3 years.
4. Achieve a 50% increase income from commercial research by 2022.
5. Establish three new strategic partnerships with the industry and charity sectors by 2022.
6. Open new commercial research portfolios in one new clinical area per year.
7. Deliver 10 new SME research and innovation collaborations by 2022.
8. By 2022, deliver at least 5 CRN portfolio studies requiring cross system working in partnership with local NHS organisations and the CRN.

7.4 Organisational

UHS is committed to research, and the importance of promoting a positive research culture is recognised. We understand the potential for clinical research to link our services to local and regional partners and support health system change across the full care pathway.

We will engage at every level within and across the organisation, sharing the organisation’s vision for research and information about research taking place.

We will develop wider recognition of research and its impact from Trust Board to front line. Our culture will encourage staff and patients to become involved in research, whether it’s leading on a clinical trial, advising research teams, helping to recruit patients in projects led by others or ensuring evidence is introduced into practice.

Our ultimate aim is for all clinical areas to have portfolios of research. Clinical services will be pro-active in developing these portfolios, which will include commercial and non-commercial research studies relevant to their staff and patients. Research activity, as one measure of clinical quality, will be plainly visible to clinicians and managers.

In partnership with the UoS, we have particular areas of strength in both experimental and applied health research, which are recognised internationally and funded by NIHR and other major funders. We will continue to expand these areas of strength. In developing their portfolios, clinical services will be expected to work with and contribute as appropriate to the successful delivery of one or more of the major research centres and programmes.

We will ensure our research addresses the challenges identified in the NIHR ‘Health Futures’ 20 year forward view. We will invest in emerging areas where we can take a lead nationally, e.g. genomics and data science, and make a significant contribution to the translation of science into new therapies through NIHR initiatives such as the Translational Research Collaborations in respiratory medicine, rare diseases and musculoskeletal disease.

With our partners, we will create the Southampton Biomedical Informatics Centre and Innovation Space, a place where access to accurate, real-time, patient-based clinical and research information systems will enable advanced clinical informatics and analysis. Our capability will help to bridge the translational gaps in genomics, cancer and chronic diseases.

As part of an integrated Learning Health System, we will use the emerging digital architecture within the NIHR Southampton BRC,
the STP footprint and the UHS Digital Excellence Programme to extend our reach along the full cycle of care irrespective of location. Our ambition and platforms will enable us to make maximum use of available data, incentivising improvement in data quality and support rapid cycle delivery of healthcare improvement and innovation.

Our University-Hospital partnership benefits from strong governance structures for strategic development, efficient delivery and oversight of research. As we deliver our ambition across our clinical services, we will ensure our governance structures support growth in existing, new and emerging areas.

Goals:

1. Establish new research portfolios in one clinical service per UHS Division per annum
2. Secure top 5 ranking for recruitment, weighted for complexity, to CRN portfolio studies for specialties with established research portfolios and top 20 ranking for emerging specialties
3. Increase research income to £25m per annum by 2022
4. Increase total value of successful grant applications led by UHS by 10% per annum
5. Secure NIHR Experimental medicine infrastructure in 2021/22:
   - NIHR Biomedical Research Centre with increased themes and funding
   - NIHR Clinical Research Facility for experimental medicine
   - NIHR/CRUK Experimental Cancer Medicine Centre
6. Secure:
   - NIHR Design Service South Central in 2017
   - Clinical Trials Unit in 2017/18 and UKCRC registration
7. Secure CRUK Cancer Centre in 2022
8. Secure NIHR infrastructure for applied health research (formally CLAHRC) in 2018/19
9. Open new Southampton Biomedical Informatics Centre and Innovation Space in 2018/19
10. Deliver 3 new digital platforms to enhance clinical research and support a Learning Health System by 2020
11. Deliver national metrics for site set-up for research studies

7.5 Summary of Goals

**Public, patients and staff**

1. Report the impact of 5 practice changing research studies in the next 5 years
2. Be a founding partner of the Wessex Patient Involvement Network in 2017
3. In 2018, publish refreshed Patient and Public Involvement and Engagement strategies
4. For recruitment of research participants to CRN portfolio studies, to be in the top 5 NHS Trusts for interventional studies and 10 NHS Trusts for all studies
5. By 2022 achieve a 50% increase in early-phase experimental medicine research activity
6. Achieve an annual increase in the percentage of UHS patients participating in research studies
7. Develop mechanisms to record staff participation in research by 2018, determine realistic goal to increase and achieve by 2022

**Workforce**

1. Increase the number of Principal and Chief Investigators by 50% and 20%, respectively by 2022
2. For 3% of NIHR CRN portfolio studies to be led by UHS/UoS Chief Investigators
3. Increase by >25% the number of UHS staff included in the Research Excellence Framework in 2021
4. By 2022 increase the number of UoS/UHS Honorary Associate Professors and Professors by 20%
5. Secure 8 NIHR Senior Investigator awards by 2022
6. Double the number of NIHR and other relevant doctoral, post-doctoral and senior fellowships across the professions by 2022

**Partnerships**

1. By 2022, increase the combined, UHS R&D, UoS Faculties of Medicine and Health Sciences annual research income by 30%
2. Grant funding leveraged by the NIHR Southampton infrastructure to be at least 8 fold increase on NIHR core infrastructure funding by 2022
3. Deliver 1 major capital project in partnership with the UoS within 3 years
4. Achieve a 50% increase income from commercial research by 2022
5. Establish three new strategic partnerships with the industry and charity sectors by 2022
6. Open new commercial research portfolios in one new clinical area per year
7. Deliver 10 new SME research and innovation collaborations by 2022
8. By 2022, deliver at least 5 CRN portfolio studies requiring cross system working in partnership with local NHS organisations and the CRN

**Organisational**

1. Establish new research portfolios in one clinical service per UHS Division per annum
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9. Open new Southampton Biomedical Informatics Centre and Innovation Space in 2018/19
10. Deliver 3 new digital platforms to enhance clinical research and support a Learning Health System by 2020
11. Deliver national metrics for site set-up for research studies
8 Delivering the strategy

The strategic plan to realise our goals includes key initiatives within four enabling programmes:

- Developing our workforce
- Building on our world class infrastructure and facilities
- Strengthen our existing and develop new partnerships
- Developing our systems

8.1 Strategic plan for research

Developing our workforce

Realise a change in our approach to nurturing the careers of our health research workforce, so they can drive the next generation of clinical discoveries, advancing knowledge and improving the health and care of patients

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Establish a cohesive and consistent ‘core’ offer for medical and non-medical trainees to enable career development, education & training of our next generation of world class translational research leaders

Through the Southampton Academy of Research, develop a vibrant and connected interdisciplinary and multi professional research training community

Capacity build clinical and non-clinical research workforce through reinvestment of income leveraged from existing awards, e.g. BRC, CRF, SCTU

Secure appropriate honorary contracts for NHS clinical staff with UoS and establish process for new starters

In partnership with the UoS, review investment in our Clinical Academic workforce and ensure that we maintain a level of funding that is comparable to similar large University Hospital Trusts

Further existing work to increase recognition and where appropriate provide protected time for research in clinician job plans

Ensure that UHS staff who work closely with UoS have the opportunity to receive honorary Associate Professor and Professor academic appointments

Implement the national recommendations and additional local measures as required on a case by case to support staff moving between HEIs and the NHS as part of their clinical and academic training

Develop mechanisms to identity future NIHR Senior Investigator’s and support individuals towards successful NIHR SI applications

Strengthen management, capacity and leadership of our research nurse and CTA and research fellow workforce increasing integration with the clinical services through joint appointments

Identify and support staff delivering quality improvement initiatives and innovation to apply their skills to funded research

Expand education and training offer for non-clinical research administrative and management staff and improve career path and options

Raise profile of Southampton as a place that develops and nurtures the careers of trainees and secures them permanent positions

Ensure all clinical and non-clinical staff are equipped with research know-how relevant to their roles and empower them to use that knowledge to ensure every patient is offered the opportunity to participate in research

Strengthen our existing and develop new partnerships

Deliver the R&D engagement and communications strategy focussed on; ensuring internal and external recognition of UHS/UoS research, our expertise and contribution to health and wealth benefits, engaging the local research community the benefits and nature of collaboration

Be a founding partner of the Wessex Patient Involvement Patient Involvement Network and progress plans arising from regional strategic review of PPI

Working with the Wessex PIN, refresh and implement our Patient and Public Involvement and Engagement strategies

Develop strong NIHR infrastructure and UHS departmental engagement, marketing and development plans for life science industries working with UoS Institute for Life Sciences, the AHSN, CLAHR and CRN

Deliver a communications strategy and engagement plan to support the development of new local, regional, national and international strategic partnerships

Develop a strong relationship with the STPs realising the benefits of knowledge mobilisation to provide robust and objective evidence for commissioning and decommissioning decisions

Establish our position within the National Office for Clinical Research Infrastructure Translational Research Collaborations for Respiratory, Musculoskeletal and Rare Diseases

Ensure timely, reliable and consistent delivery of contract commercial research meeting national key performance indicators for commercial research
Develop a strategic engagement plan to mutually support research programmes for large companies focused on increasing contract commercial research and collaborations with both large pharma/medtech and SMEs targeting clinical areas with potential for growth

Establish mechanism within our core clinical academic strengths to better engage SMEs

Develop and execute strategic plan for increased partnership working with charity sector and international partners

Build on our existing relationships with Wessex NHS organisations to improve delivery of research across organisation boundaries - research hospital without walls

Building on our world class infrastructure and facilities

Create a physical home for the Southampton Biomedical Informatics Centre and Innovation Space

Collaborating with the UoS services, invest in targeted grant application support for UHS/UoS staff to increase awareness of opportunities and success in securing research grants and awards

Develop capacity and capability within pharmacy and imaging to support and lead research studies

Develop capacity to implement a Learning Health System through platforms linked to capability within the Digital Excellence Programme, and digital tools for intervention, measurement of outcomes, and rapid implementation of innovation and healthcare improvement

Deliver a strategic review of existing CLAHRC to inform future application for NIHR applied health infrastructure

Further develop our laboratory capacity and capability to support and deliver experimental medicine programmes

Develop and maintain high quality research career development, education and training infrastructure and environment across the Southampton clinical research partnership

Build towards working as an integrated Academic Health Science Centre, integrating current and future NIHR experimental medicine and applied health research infrastructure including the NIHR BRC, CRF, ECMC, NIHR RDS South Central and CRUK Cancer Centre

Invest in facilities to increase delivery of phase III and IV commercial research studies

Developing our systems

Review and update our governance structure to reflect the expansion and consolidation of research activity throughout the Trust to ensure continued and improve decision making and communication

Deliver the R&D central office optimisation project aimed at increasing capacity and improving capability to better support the delivery of the Trust’s research portfolio

Improve on and off-line support for the Southampton clinical research partnership research community and with an increased focus on customer support

Improve systems for capturing research activity, outputs and impact across the Southampton clinical research partnership and strategic dissemination to partners and funders

Launch a system to track career development of Southampton’s clinical research partners’ trainees and early career researchers and monitor our research capacity development performance

Establish mechanisms to drive, manage and monitor researcher career development across all staff groups

Develop mechanisms to facilitate participation in clinical registries and clinical trials for all patients in our care

Develop highly professional research support services jointly with the UoS

Develop systems to better facilitate knowledge mobilisation, using evaluations to inform the research pipeline, and research to inform practice

Develop supporting infrastructure and implementation methodology to rapidly test/evaluate interventions in practice, shortening the implementation time for new developments

Developing our systems

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<td>Medium term 3-5 yrs</td>
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Target date

| Short term 1-2 yrs |
| Short term 1-2 yrs |
| Medium term 3-5 yrs |
| Medium term 3-5 yrs |
| Long term 5 yrs |
| Long term 5 yrs |
8.2 Performance framework

Performance against Key Performance Indicators (KPIs) will be reported to Trust Board on a monthly basis. The KPIs will be supported by a more detailed performance framework that reflects the strategic goals. Quarterly review of more detailed performance metrics will be undertaken by the Research and Development Steering Committee and members of the Trust Board. The Divisional R&D Leads will also review performance on a quarterly basis within their clinical divisions. The performance framework will be reviewed annually and amended as required.

8.3 Funding

Research is a key part of the Trust’s strategy and will contribute to the Trust’s overall financial success. Implementation of the research strategy will be funded through ambitious large-scale research proposals to external funders and prestigious awards for research programmes and projects, leveraging existing Trust and University resources.

In 2017/18 the Trust will receive £19m in research income and make a further indirect savings from research activity including £4m from patient participation in contract commercial research (based on an average indirect saving of £5k per annum per patient recruited). Realignment of research income and new targeted Trust investment for key high profile initiatives will provide necessary support to secure increased external funding. Strategic investment by the Southampton Hospital Charity will focus on creating the next generation of researchers.

<table>
<thead>
<tr>
<th>Trust Board KPIs 2017/18</th>
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<tbody>
<tr>
<td>KPI</td>
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<tr>
<td>Grant applications</td>
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<tr>
<td>1. Value of awarded grant applications led by UHS</td>
</tr>
<tr>
<td>1.1 NIHR funders</td>
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<tr>
<td>1.2 All funders (including NIHR)</td>
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<tr>
<td>CRN portfolio recruitment</td>
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<tr>
<td>2. National ranking for recruitment to CRN portfolio</td>
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<tr>
<td>2.1 All CRN portfolio studies</td>
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<tr>
<td>2.2 Commercial studies</td>
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<tr>
<td>2.3 Interventional studies</td>
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<tr>
<td>3. Percentage of commercial CRN portfolio studies closing on target (NIHR CRN metric)</td>
</tr>
<tr>
<td>4. Percentage share within Wessex of weighted recruitment to CRN portfolio studies</td>
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<tr>
<td>5. Number of participants recruited to CRN portfolio studies</td>
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<tr>
<td>NIHR Central Commissioning Fund metrics</td>
</tr>
<tr>
<td>6. Performance in Initiating and Delivery of commercial studies (PID report)</td>
</tr>
<tr>
<td>6.1 ‘70 day target’ - 1st patient recruited within 70 days for UHS R&amp;D confirmation of capability and capacity</td>
</tr>
<tr>
<td>6.2 Percentage of all commercial studies closing on time (NIHR CCF metric)</td>
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<tr>
<td>Organisational</td>
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<tr>
<td>7. Total R&amp;D Income</td>
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</table>

8.4 Review

Delivery of the UHS Research Strategy will be overseen by the UHS R&D Steering Committee reporting to Trust Board and the UHS/UoS Joint Strategy Board.

The UHS R&D Steering Committee will ensure the strategy remains relevant in the rapidly changing environment of clinical research through regular review with patients and partners. Through execution of this strategy, Southampton will continue to be a world leading research centre, recognised globally, delivering high quality patient care now and for the future.

9 Resources

9.1 For patients, public, staff and researchers

Clinical Research at University Hospital Southampton NHS FT

Information for the public, patients, staff, researchers and partners about the clinical research environment and activity at UHS in partnership with the UoS.

NIHR CRN Wessex

NIHR CRN Wessex provides infrastructure that allows high-quality clinical research to take place in the NHS in Wessex.

I AM RESEARCH campaign

“I Am Research” gives patients, the public and health and social care research professionals a chance to shout about how fantastic research is. We aim to raise awareness of the benefits of research and the positive impact it has on people’s lives.

INVOLVE

INVOLVE was established in 1996 and is part of, and funded by, the NIHR to support active public involvement in NHS, public health and social care research. It is one of the few government funded programmes of its kind in the world.

Southampton clinical trials search

A searchable list of clinical research studies ongoing at University Hospital Southampton NHS Trust.

9.2 Research design and grant application support

Research Design Service, South Central

Providing free advice on research design to researchers in the South Central region who are developing proposals for national, peer-reviewed funding competitions in applied health or social care research.

Southampton Clinical Trials Unit SCTU

The SCTU is a UKCRC registered CTU with expertise in the design, conduct and analysis of multicentre interventional clinical trials. The SCTU staff work in partnership with investigators to deliver high quality trials that will directly influence routine clinical practice.

UK Clinical Trials Gateway

Provided by the NIHR to help people make informed choices about taking part in clinical trials. It also helps researchers find suitable people for the trials they’re running.

9.3 Organisational

University Hospital Southampton NHS Foundation Trust Research Strategy 2017 – 2022

University Hospital Southampton NHS Foundation Trust Research Strategy 2017 – 2022
Appendix 3: UHS/UoS Local, National and International Partnerships

To review and download the suite of Academic Health Science Networks (AHSNs) across England, see the following link. 

http://www.uos.ac.uk/research/ahsn-networks.html

Academic Health Science Networks

There are 15 Academic Health Science Networks across England, established by NHS England in 2013 to spread innovation at pace and scale – improving health and generating economic growth. Each AHSN works across a distinct geography serving a different population in each region as shown on the map below.

Arm’s Length Bodies

Arm’s Length Bodies are the Department of Health’s agencies and partner organisations, are also known as arm’s length bodies. They are: NHS England, NHS Improvement, Care Quality Commission, National Institute for Health and Care Excellence, Public Health England, NHS Digital, Health Education England, Health Research Authority, NHS Blood and Transplant, Medicines and Healthcare Products Regulatory Agency, NHS Business Services Authority, NHS Litigation Authority, and Human Fertilisation and Embryology Authority, Human Tissue Authority.

FortisNet

An interdisciplinary hub of expertise in regenerative medicine, orthopaedics, prosthetics and assistive technologies.

Hospital Standardised Mortality Ratio

The Hospital Standardised Mortality Ratio scoring system works by taking a hospital’s crude mortality rate and adjusting it for a variety of factors – population size, age profile, level of poverty, range of treatments and operations provided, etc. By taking these factors in to account for each hospital, it is possible to calculate two scores – the mortality rate that would be expected for any given hospital and its actual observed rate. It is the difference between these two rates that is important when it comes to HSMR.

Learning Health System

A Learning Health System is one in which progress in science, informatics and care culture align to generate new knowledge as an ongoing, natural by-product of the care experience, and seamlessly refine and deliver best practices for continuous improvement in health and health care.

Medical Research Council

The Medical Research Council is a publicly funded government agency responsible for co-ordinating and funding medical research in the United Kingdom.

NHS Constitution

The NHS Constitution sets out rights for patients, public and staff. It outlines NHS commitments to patients and staff, and the responsibilities that the public, patients and staff owe to one another to ensure that the NHS operates fairly and effectively. All NHS bodies and private and third sector providers supplying NHS services are required by law to take account of the Constitution in their decisions and actions.

Office for Life Sciences

The Office for Life Sciences champions research, innovation and the use of technology to transform health and care service.

Office for Strategic Coordination of Health Research

The Office for Strategic Coordination of Health Research acts as a central coordinating body for health research.

Glossary

Academic Health Science Networks

Arm’s Length Bodies

FortisNet

Hospital Standardised Mortality Ratio

Learning Health System

Medical Research Council

NHS Constitution

Office for Life Sciences

Office for Strategic Coordination of Health Research
The UK Clinical Research Collaboration Partners goal is to establish the UK as a world leader in clinical research.

### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AHSN</td>
<td>Academic Health Science Network</td>
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<tr>
<td>ALBs</td>
<td>Arm’s Length Bodies</td>
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<tr>
<td>AMRC</td>
<td>Association of Medical Research Charities</td>
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<tr>
<td>BMJ</td>
<td>British Medical Journal</td>
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<tr>
<td>BRC</td>
<td>Biomedical Research Centre</td>
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<tr>
<td>CLAHRC</td>
<td>Collaborations for Leadership in Applied Health Research and Care</td>
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<tr>
<td>CRF</td>
<td>Clinical Research Facility</td>
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<tr>
<td>CRN</td>
<td>Clinical Research Network</td>
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<tr>
<td>CRUK</td>
<td>Cancer Research United Kingdom</td>
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<tr>
<td>CTA</td>
<td>Clinical Trials Assistant</td>
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<td>CTU</td>
<td>Clinical Trials Unit</td>
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<tr>
<td>ECMC</td>
<td>Experimental Cancer Medicine Centre</td>
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<tr>
<td>HEI</td>
<td>Higher Education Institution</td>
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<tr>
<td>HSMR</td>
<td>Hospital Standardised Mortality Ratio</td>
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<tr>
<td>IFLS</td>
<td>Institute of Life Sciences</td>
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<tr>
<td>KPI</td>
<td>Key Performance Indicator</td>
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<td>KPMG</td>
<td>Financial Auditors</td>
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<td>LHS</td>
<td>Learning Health System</td>
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<tr>
<td>MRC</td>
<td>Medical Research council</td>
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<td>NAMRIP</td>
<td>Network for Antimicrobial Resistance and Infection Prevention</td>
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<td>NHS</td>
<td>National Health Service</td>
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<td>NIHR</td>
<td>National Institute of Health Research</td>
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<td>OSCHR</td>
<td>Office for Strategic Coordination of Health Research</td>
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<td>PIN</td>
<td>Patient Involvement Network</td>
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<td>PPE</td>
<td>Patient and Public Engagement</td>
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<td>PPI</td>
<td>Patient and Public Involvement</td>
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<td>Research and Development</td>
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<td>Southampton Clinical Trials Unit</td>
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<td>SME</td>
<td>Small and Medium-sized Enterprises</td>
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<td>Southampton Academy of Research</td>
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<td>Strategic Transformation Plans</td>
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<td>University Hospital of Southampton Foundation Trust Chief Executive Officer</td>
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<td>United Kingdom Clinical Research Collaboration</td>
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<td>University of Southampton</td>
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