

City Hospitals Sunderland NHS Foundation Trust

Research & Innovation Strategy

2016-2021

“Excellence in Health putting People first”

"However beautiful the strategy, you should occasionally look at the results"
Winston Churchill

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1.0 The ethos of the Trust is based on:

Excellence in Health putting People first

Our Vision

- Our care is high quality, safe and personal
- Our staff will use their skills to treat patients in clean, comfortable surroundings to the highest quality, offering choice as widely as possible
- Our patients come here for their care because we aim for excellence in everything we do – our first priority is our patients
- We set high standards of behaviour and professionalism for all our staff

Our Values

- Driven by clinical quality
- Creating the ideal patient experience
- Listening to our patients, carers and families and learning from their experiences.
- Listening to our staff and encouraging them to improve services
- Financial sustainability to invest in the future
- Patient centred, business focused
- Pride in who we are and what we do

We will promote:

- A clinical quality strategy
- Customer service and quality awareness
- Service improvement
- Market intelligence and customer feedback.
- Leadership at all levels
- A performance management framework
- Financial skills and awareness
- Smart use of Information Technology

The board will continue to drive the Trust's vision and philosophy through a number of key delivery areas:

- Best quality
- Highest safety
- Shortest lead time
- Highest morale; and
- Cost leadership

There are a number of key priorities for the Trust to deliver. These are to:

- align organisational resources to deliver the Vision;
- introduce and embed Lean training and techniques throughout the organisation to deliver continuous improvements in quality;

- create and sustain a proactive “can do” culture where staff are empowered;
- encourage and foster innovation;
- have zero tolerance for waste;
- use quality improvement to deliver cost effectiveness;
- allocate resources to deliver organisational priorities;
- compete against tariff to deliver tariff minus 10%;
- deliver a significant surplus to reinvest in healthcare services.

2.0 CHS Research & Innovation - Vision & Mission:

Vision

“To be one of the leading research active NHS Trusts in the North East, promoting innovation at appropriate ‘scale and pace’, with the aim of providing a high quality, safe, personal, efficient and effective service to our patients, within a sustainable business environment.”

Mission

“To encourage, enable and extend research and innovation activity throughout the Trust; to foster an environment and culture which promote and support the effective development and commercialisation of intellectual property arising from within the Trust.”

3.0 Introduction

3.1 National Context for Research in the NHS:

The NHS Constitution published in January 2009, commits to the promotion and conduct of research to improve the current and future health and care of the population. The commitment features in one of seven key principles - the principle that the NHS aspires to high standards of excellence and professionalism. The NHS Constitution includes pledges about access to information and informed choice. The Handbook to the draft NHS Constitution explains how these pledges will apply to research (<http://www.nihr.ac.uk/policy-and-standards/nhs-constitution.htm> - last accessed 15/09/2015)

"Research is a core part of the NHS. Research enables the NHS to improve the current and future health of the people it serves. The NHS will do all it can to ensure that patients, from every part of England, are made aware of research that is of particular relevance to them. The NHS is therefore putting in place procedures to ensure that patients are notified of opportunities to join in relevant ethically approved research and will be free to choose whether they wish to do so." (*Handbook to the NHS Constitution, January 2009*)

NHS England Research and Development Strategy

The NHS England Research and Development Strategy 2013-2018 identifies priorities for the promotion of research through:

- Visible leadership;
- Research into clinical interventions and innovations that have the greatest impact on outcomes;
- Supporting the NHS as a good place for both commercial and non-commercial research;
- Promoting health system policy research as a means of improving outcomes;
- The establishment of clear links with clinical leaders across all professions, with academia, industry, and with non-clinical researchers in health and social care;
- The development of clear governance structures

(NHS England, 2013 - NHS Research and Development Strategy 2013-2018)

The National Institute for Health Research (NIHR) and Clinical Research Networks (CRNs)

The National Institute for Health Research is funded through the Department of Health, and maintains a system in which the NHS supports those conducting research to meet the needs of patients and the public.

(National Institute for Health Research, 2014a)

The NIHR funds 15 Clinical Research Networks with the purpose of delivering research of direct benefit to NHS patients. The funding aims to underpin the practical support researchers require to deliver high quality clinical research in the NHS environment (concentrating on later phase *clinical* studies).

NIHR Vision

To improve the health and wealth of the nation through research.

NIHR Mission

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 Aims

- Establish the NHS as an internationally recognised centre of research excellence
- Attract, develop and retain the best research professionals to conduct people-based research
- Commission research focused on improving health and social care
- Strengthen and streamline systems for research management and governance
- Increase the opportunities for patients and the public to participate in, and benefit from, research
- Promote and protect the interests of patients and the public in health research
- Drive faster translation of scientific discoveries into tangible benefits for patients
- Maximise the research potential of the NHS to contribute to the economic growth of the country through the life sciences industry
- Act as sound custodians of public money for the public good

See NIHR weblink: <http://www.nihr.ac.uk/about/mission-of-the-nihr.htm>

To achieve these aims, the NIHR has set high level objectives (HLOs) and it is against these that NHS Trusts are assessed on the delivery of clinical research for both commercially-sponsored and non-commercial (academic) trials. Delivering to time and target for studies adopted onto the UK Clinical Research Network (UKCRN) NIHR 'portfolio' is central to the high level objectives:

- Increasing the proportion of Portfolio studies that deliver in line with the study's planned delivery time and patient recruitment targets
- Doubling the number of participants recruited into studies on our Portfolio

- Reducing the time it takes to get NHS permission for a study to start
- Reducing the length of time it takes to recruit the first participant onto Portfolio studies
- Increasing the number of life-sciences studies on our Portfolio
- Increase the percentage of NHS Trusts that are involved in delivering our Portfolio

Specific targets for each HLO are detailed in the table below:

Objective	Measure	Target	
1	Increase the number of participants recruited into NIHR CRN Portfolio studies	Number of participants recruited in a reporting year into NIHR CRN Portfolio studies	650,000
2	Increase the proportion of studies in the NIHR CRN Portfolio delivering to recruitment target and time	A: Proportion of commercial contract studies achieving or surpassing their recruitment target during their planned recruitment period, at confirmed Network sites	80%
		B: Proportion of non-commercial studies achieving or surpassing their recruitment target during their planned recruitment period	80%
3	Increase the number of commercial contract studies delivered through the NIHR CRN	A: Number of new commercial contract studies entering the NIHR CRN Portfolio	600
		B: Number of new commercial contract studies entering the NIHR CRN Portfolio as a percentage of the total commercial MHRA CTA approvals for Phase II–IV studies	75%
4	Reduce the time taken for eligible studies to achieve NHS Permission through CSP	Proportion of eligible studies obtaining all NHS Permissions within 40 calendar days (from receipt of a valid complete application by NIHR CRN)	80%
5	Reduce the time taken to recruit first participant into NIHR CRN Portfolio studies	A: Proportion of commercial contract studies achieving first participant recruited within 30 calendar days of NHS Permission being issued or First Network Site Initiation Visit, at confirmed Network sites	80%
		B: Proportion of non-commercial studies achieving first participant recruited within 30 calendar days of NHS Permission being issued	80%
6	Increase NHS participation in NIHR CRN Portfolio Studies	A: Proportion of NHS Trusts recruiting each year into NIHR CRN Portfolio studies	99%
		B: Proportion of NHS Trusts recruiting each year into NIHR CRN Portfolio commercial contract studies	70%
		C: Proportion of General Medical Practices recruiting each year into NIHR CRN Portfolio studies	25%
7	Increase the number of participants recruited into Dementias and Neurodegeneration (DeNDRoN) studies on the NIHR CRN Portfolio	Number of participants recruited into Dementias and Neurodegeneration (DeNDRoN) studies on the NIHR CRN Portfolio	13,500

3.2 National Context for Innovation in the NHS

“Innovation Health and Wealth” is the NHS Chief Executive’s report on the identification, adoption and spread of innovation in the NHS. Launched by the Prime Minister in December 2011, it sets out the contribution that the NHS can make to the Government’s ‘Plan for Growth’. It defines innovation as “an idea, service or product, new to the NHS or applied in a way that is new to the NHS, which significantly improves the quality of health and care wherever it is applied”

Linked with this report is the Department for Business Innovation and Skills – Strategy for UK Life Sciences. Both reports give similar messages confirming that

the demand, nationally and internationally, to do more health care with less resource means that ‘business as usual’ is no longer an option and that Innovation should be utilised to solve the problems we face both now and in the future.

(Strategy for UK Life Sciences. Department for Business Innovation & Skills 2011)

“Innovation Health and Wealth” outlines three reasons why innovation and adoption at pace are important not just to the NHS but to society and the economy as well:

- Innovation transforms patient outcomes;
- Innovation can simultaneously improve quality and productivity;
- Innovation is good for economic growth.

“Innovation has been at the heart of the NHS since its creation”

“Innovation Health and Wealth” also describes the gap between the invention of new ideas and identification of best practice and their adoption and spread. Great innovations are often implemented quickly in one or two places but in the NHS, as in other health care systems, diffusion is slow, often taking many years.

(Innovation Health and Wealth: Accelerating Adoption and Diffusion in the NHS. DH 2011)

The subsequent publication of the ‘NHS Five Year Forward View’ (NHS FYFV), published in October 2014 by NHS England, sets out a positive vision for the future based around seven new models of care.

Weblink: <http://www.kingsfund.org.uk/projects/nhs-five-year-forward-view>

The Executive summary contains specific mention of both research & innovation within the NHS:

“We will invest in new options for our workforce, and raise our game on health technology – radically improving patients’ experience of interacting with the NHS. We will improve the NHS’ ability to undertake research and apply innovation – including by developing new ‘test bed’ sites for worldwide innovators, and new ‘green field’ sites where completely new NHS services will be designed from scratch.”

Weblink: <https://www.england.nhs.uk/ourwork/futurenhs/nhs-five-year-forward-view-web-version/5yfv-exec-sum/>

3.3 Local context for research:

Prior to 2014/15, CHS was a ‘member organisation’ within the Northumberland, Tyne & Wear Comprehensive Local Research Network (NTW CLRN). NTW CLRN was one of 102 clinical research networks in England, each reporting to one of 8 national co-ordinating centres, responsible for delivering NIHR clinical research trials. After a 6 month transition period, the new Clinical Research Network: North East and North Cumbria (CRN: NENC) was established in April 2014 as part of the wholesale national reform in England to improve efficiency and effectiveness of research delivery. CHS is a ‘Partner Organisation’ (PO) in the CRN: NENC which covers a

geographical area which includes the previous NTW CLRN, County Durham & Tees Valley CLRN as well as West Cumbria, previously part of the Manchester network.

CRN: NENC weblink: <https://www.crn.nihr.ac.uk/north-east-and-north-cumbria/>

The previous six research Divisions were reviewed in 2015 and now have collective 'Group' names. The new groups better reflect function with a relatively equal distribution of portfolio trials/workload within each group:

Collective Group name	Specialties
Cancer	Cancer
Circulatory and Endocrine	Cardiovascular, Diabetes, Metabolic and Endocrine, Renal, Stroke
'CHaRGe' (Children, Haematology, Reproductive Health and Childbirth, Genetics)	Children, Haematology, Reproductive Health and Childbirth, Genetics
Community	DeNDRoN, Health Services and Delivery Research, Mental Health, Oral and Dental, Primary Care
Medical Specialties	Ageing, Dermatology, Gastroenterology, Hepatology, Infectious Diseases, Neurology, Respiratory
'SMART' (Surgery, Musculoskeletal, rehabilitation and Trauma)	Anaesthesia et al, Critical Care, ENT, Injuries and Emergencies, Musculoskeletal, Ophthalmology, Surgery

3.4 Local context for innovation:

City Hospitals Sunderland is a partner organisation of the North East & North Cumbria Academic Health and Sciences Network (NENC AHSN). The NENC AHSN maps functionally and geographically to the same area as the NENC CRN and is responsible for 'Health Improvement' and 'Wealth Creation' Practically this includes embedding clinical research findings rapidly into practice, as well as developing links between local industry and NHS organisations.

NENC AHSN weblink: <http://ahsn-nenc.org.uk/>

The NENC AHSN is tasked with building on existing collaborations and bringing together the commissioners and providers in the local NHS, higher educational

institutions, and other partners including public health social care, to work with industry and deliver innovation. The AHSNs in relation to the NHS focus on:

- Leading local work in the NHS on innovation
- Supporting knowledge exchange networks
- Timely embedding of research findings
- Supporting links to facilitate development of industry & technology research
- Pump-priming innovation projects, similar to the Regional Innovation Fund
- Applying Change Model being developed by the NHS Commissioning Board
- Providing consistent advice on intellectual property management to the local NHS and Universities
- Identifying and supporting the development, testing and commercialisation of ideas that have the potential to become best practice
- Work with procurement teams to support systematic adoption and spread across partners

(AHSN guidance. <http://www.dh.gov.uk/health/2012/06/ahcn/> Accessed 03/09/2015)

The Innovation department was formally launched at City Hospitals Sunderland on the 27th January 2015. Four “Innovation Scouts” were appointed to cover the breadth of the Trust in the following areas: Medicine & Dentistry, Nursing & Midwifery, Allied Health Professionals & Support Services. With the support of technology transfer monies from NENC AHSN, the Innovation Manager has the support of a fulltime Innovation Administrative Assistant.

The Sunderland CARE Academy (SCA):

The Care Academy is a ‘virtual academy’ set up in 2014 which includes membership from a variety of local organisations involved in delivering aspects of healthcare to our Sunderland population. The CARE Academy comprises City Hospitals Sunderland NHS Foundation Trust, University of Sunderland, Sunderland CCG, Sunderland City Council, Sunderland Carers’ Centre, the SAFC Foundation of Light, South Tyneside NHS Foundation Trust and Sunderland College. It is a vehicle for sharing strategic direction and adopting and diffusing research findings through the partners more rapidly. The primary activity of the CARE Academy is facilitated through four work streams. These work streams are aligned with the priorities of the partners and with the research and service delivery strengths in Sunderland. In working like this the CARE Academy will integrate and harness combined strengths across all partners in creating a whole health system approach to the delivery of health services, research and education. The Research stream of the SCA has

established a strong and sustained portfolio of research outputs including publications, conference presentations and funding across the Trust.

The department of R&I will engage with all members of the local healthcare and research community through the Sunderland CARE Academy to drive forward improvements in outcomes for the benefit of the whole Sunderland community.

The Research & Innovation department is an active, contributing member of the CARE Academy (the director of R&I is an invited member).

3.5 Research & Innovation across City Hospitals Sunderland & South Tyneside NHS Foundation Trusts

In achieving our vision & mission, City Hospitals Sunderland Research & Innovation department will aspire to create a culture where there is a porous interface between research and innovation that benefits researchers, practitioners, and innovators. The 'Research' and 'Innovation' arms of the department will work seamlessly to maximise efficiency and output, aiming to improve safety and quality of care for our patients.

The strategy will be reviewed to encompass the clinical, research & innovation collaboration developing between CHS and South Tyneside NHS Foundation Trusts:

South Tyne & Sunderland Research & Innovation Collaborative

During 2016 the developing clinical links between South Tyneside and City Hospitals Sunderland to move towards a single functional unit have moved at a rapid pace. These developing links will be encompassed by both departments of research and innovation. This will require a move towards functioning as a joint unit under a unified research and innovation strategy. The units have worked collaboratively over the last two years with several examples of cross-PO initiatives:

- Research delivery support at S Tyneside by the CHS midwifery research team
- Successful submission of a cross-organisation specialty funding bid to the NENC CRN to support paediatric research delivery at South Tyneside
- Submission of formal joint 'expressions of interest' to undertake delivery of industry-sponsored NIHR portfolio trials as a research collaborative

The Directors of Research and Senior Management teams from both organisations have committed to meeting up to develop with the aim of moving to an agreed strategy which will allow us to eventually function as a single research and innovation department.

4.0 Strategic Aims to achieve our Vision (2016-2021):

Aim 1: Engagement:

To engage and enhance patient and staff involvement in National Institute for Health and Research (NIHR) portfolio research, non-portfolio research and innovation.

Aim 2: Collaboration:

Foster collaborative working relationships with stakeholders including external agencies, both academic and commercial.

Aim 3: Culture:

Foster a culture of research and innovation within every facet of the organisation, delivering research and innovations that improve quality, enhance patient safety and reduce costs in line with the Department of Health's Innovation, Health and Wealth Report (2011) and the NHS Five Year Forward View (2014).

Aim 4: Capacity:

Give staff with the tools, training, support and guidance to deliver high quality translational and applied health services research & innovation which will directly benefit our patients.

To explore the feasibility of establishing a purpose built, on-site Clinical Research & Innovation Facility (CRIF) allowing centralisation of research & innovation staff & improving our outward facing image to external partners, including industry partners for research & innovation.

To increase funding brought into the Trust from research and innovation grants, industry-sponsored trials and external sponsorship

Aim 1: Engagement:

To engage and enhance patient and staff involvement in National Institute for Health and Research (NIHR) portfolio research and non-portfolio research.

Evidence confirms that patients who participate in research have better clinical outcomes, irrespective of whether they are allocated to trial or conventional treatment. Therefore the Trust will continue to offer more opportunities for patients, and when/where appropriate for their relatives, to be a part of clinical research. We will ensure equity of access to research opportunities in all areas.

Objective 1.1: Work towards the NIHR High Level Objectives

We will seek to support research engagement by continuing to work towards the **NIHR High Level Objectives** of;

- Increasing the number of participants recruited into portfolio studies.
- Increasing the proportion of NIHR Portfolio studies that deliver to time and target.
- Reducing the time it takes to obtain NHS permission for a study to commence in the Trust.
- Reducing the length of time taken to recruit the first participant into Portfolio studies.
- Increasing the number of life-sciences studies on our Portfolio.

Especially in:

i) Our key specialist services and areas of strength where there is a potential to build further on a strong portfolio of clinical research and activity, such as Ophthalmology, Obstetrics & Gynaecology, Cardiology and Medical Specialities.

Sunderland Eye Infirmary is recognised as an ‘Alcon Global R&D Centre for Excellence’ for clinical trials and is a Roche preferred partner for research studies.

ii) Specialities who have strong clinical activity but a small research portfolio, where there are opportunities for growth in research activity and therefore income; Areas such as Bariatrics and Orthopaedics.

- We will ensure opportunities for participation in NIHR funded commercial research studies is maximised by;
- Utilising different methods of patient and public engagement to advertise identify and recruit research participants.
- Increasing our portfolio of NIHR adopted research studies, ensuring a well balanced mix of interventional and non- interventional studies to maintain a mix of high recruiting observational and more complex clinical trials. Where possible and appropriate we will ensure this mix is reflected across all clinical specialities.

Objective 1.2: Engage Patients in Research & Innovation

In order to ensure that the population served by City Hospitals Sunderland NHS Foundation Trust is aware we are a research active and innovative organisation we will:

- Participate and support NIHR, CRN: NENC campaigns and initiatives that aim to encourage and raise awareness of research participation not only for patients but staff as well.

- We will ensure our Trust research & innovation internet pages are kept up to date and accurate – work is ongoing on our current webpage to ensure it is outward facing and patient friendly. Continue to actively participate in national initiatives such as NIHR 'OK to Ask' campaign and the Patient Research Ambassador Initiative.
- The Sunderland CARE Academy offers the department the opportunity to work with the Sunderland Carers' Centre and the Community Panel hosted by the Trust, allowing us to improve our engagement with patients and the public. We will use these resources to seek advice from patients and the public, not just about research and innovation projects but also aiming to promote research and innovation more publicly within the Trust. We will seek lay participation in the R&I Executive group.
- We will encourage our researchers to engage patient and public involvement to inform and shape their research at the earliest stages of their investigations. We will work with Patient Research Ambassadors to promote this activity.

Objective 1.3: Engage Staff & Clinicians in Research & Innovation

- The research department will support engagement in research by working with the CRN: NENC to identify appropriate research studies. We will aim to develop areas where we have the potential to be national and international leaders (eg ophthalmology) as well as continuing to support new specialty areas to become research active
- We will implement internal funding calls available to all Trust staff, for CRN initiatives and dedicated research time using Department of Health-allocated Research Capability Funding and any other available funds in order to generate the evidence for new research proposals.
- We will seek a nominated lead contact for Research & Innovation from amongst the Non-Executive Directors of the Trust.

Innovation specific engagement:

- We currently have four Innovation Scouts who engage with staff across the Trust in their specialist areas; we will extend this with the creation of newsletters, letting staff know how, and to whom they can raise any 'bright ideas' and how we will facilitate development of ideas submitted through the Innovation Review Group.
- We will use the Innovation Review group as an organised and streamlined system for the identification and harvesting of ideas from staff in the Trust.

- We will aim to increase the number of submissions from the Trust to the annual Innovations North 'Bright Ideas in Health' Annual awards, building on our success over the past three years.
- We will implement a series of internal Intellectual Property training sessions & 'Invention-spotting' surgeries across different clinical areas and Directorates within the Trust.
- We will host a series of 'Unmet needs' workshops, harnessing the collective strengths of a multidisciplinary workforce to come up with innovative solutions to problems in the workplace.

Aim 2: Collaboration: Foster collaborative working relationships with stakeholders including external agencies, both academic and commercial.

By investing and nurturing our relationships with external organisations we can boost our research and innovation capability bringing benefits for the Trust and its' patients. Sharing the knowledge, resources skills and technologies of our partners will ultimately support improvements in patient care. A strong cross-organisational strategic dialogue will be maintained with key partners; CRN: NENC , NENC AHSN, University of Sunderland and all agencies involved in the Sunderland CARE Academy. By fostering these collaborative relationships we will ensure a dynamic environment for innovative research and development activity across the Trust.

Objective 2.1: Work with our Research & Innovation stakeholders.

CRN: NENC: The department has a long and successful relationship with the local CRN. We will use network support and guidance to develop new areas of research, especially those that are highly clinically active, with the potential to be successful areas of research accrual. Over the course of this 5 year strategy, we will work with the CRN to ensure more clinical staff are directly involved in research; for example through the CRN research champion initiatives and by using additional Research Capability Funding (RCF) to support these efforts.

NENC AHSN: We will work closely with the NENC AHSN to improve the identification, adoption and spread of innovative healthcare not only across the Trust but across our regional network. We will build on technology transfer activities from 2015/16 and actively playing a role in NENC AHSN Innovation Pathway (http://ahsn-nenc.org.uk/wealth_programme/innovation-pathway/). We will use the skills and knowledge the AHSN can provide to develop telemedicine/telehealth, extending on previous successful adoptions where the Trust have been rated as outstanding by the CQC (telehealth in pregnancy).

University of Sunderland: The University has great strengths in academic research and the facilities, capacity and capability to work with us in developing our own clinical research trials. We have the capability to provide the University with access

to clinical research samples and data both qualitative and quantitative; we hope to build on this symbiotic relationship to enhance the research profile of the Trust. It will give us the capacity to develop our own research within the Trust- particularly in areas that have embedded research posts such as Bariatrics and Pharmacy.

The University are developing further facilities including a hi-fidelity Simulation lab and the innovative 'FabLab'. The department will play a key role in facilitating and establishing links with both of these facilities. In 2015, a hi-fidelity pelvic manikin was secured by CHS through a competitive award and will be based at the UoS Simulation facility where training for CHS and regional staff in obstetrics, midwifery and anaesthesia will be developed. CHS will appoint a Clinical Simulation Lead in 2016 to work collaboratively with the technical simulation staff at the University.

We have facilitated good working relationships between academics from the University and clinicians from the Trust in the development of the new Point of Care Testing Facility. The 'FabLab' will provide opportunities for rapid prototyping of innovations - allowing us to develop these at pace.

Objective 2.2: Collaborate and engage with commercial partners and SMEs

The NHS has a long and successful track record in invention; however the spread-adoption and diffusion of inventions in the NHS has often been slow. City Hospitals Sunderland key role in the AHSN Innovation Pathway is to enable local Small & Medium-sized Enterprise (SME) industry engagement with the NHS. We will facilitate this through our connections with the AHSN and Innovations North as well as the *MedConnect* group (<http://medconnectnorth.com/>). The *MedConnect* group has been set up by the CRN to engage industry with research active clinicians in both primary and secondary care Trusts.

We will work with the SME 'Quality Hospitals Solutions'; to commercialise some of our Bright Ideas from within the Trust. We have the capacity to assess, pilot or trial new devices within the Trust.

Through 'Quality Hospital Solutions' we will liaise with external organisations, particularly SMEs that have the potential and expertise to facilitate our innovations- with the ultimate aim to commercialise these.

We will build on relationships we have with SMEs in the region particularly those at NETpark- which is an internationally recognised location for science and technology companies created as a supportive environment to accelerate growth of ambitious innovations.

Aim 3: Foster a culture of research and innovation within every facet of the organisation, delivering research and innovations that improve quality, enhance patient safety and reduce costs in line with the Department of Health's Innovation, Health and Wealth Report (2011) and the NHS Five Year Forward View (2014)

Objective 3.1: Increase understanding of the roles research & innovation have in developing safe, high quality clinical care

The NHS Institute for Innovation and Improvement (renamed NHS Improving Quality in April 2013) conducted extensive reviews of the organisational factors that are associated with successful innovation in the public and private sector, “Creating the Culture for Innovation”. From this review, seven dimensions were identified; resources, goals, knowledge, rewards, tools, relationships and risk.

By renaming and launching our new Innovation department we have begun to show our commitment to innovation, with the help of funding from NENC AHSN we have been able to increase the resources and capacity we have for innovation. We will continue to support a climate for innovation so that staffs know they have the access to protected resources.

We will encourage staff to engage in innovation and to be involved in tackling challenges and solving unmet needs in their workplace. By encouraging this we can boost morale and therefore quality.

Knowledge fuels innovation and we will therefore communicate organisational and partner organisation information honestly and rapidly.

We will encourage staff to work across multi-disciplinary boundaries; so that Innovation may flourish.

We will monitor changes in our innovation culture.

Objective 3.2: Support development of internal Innovation, research and development projects

We will assist staff within the Trust in developing innovative multidisciplinary research and ‘bright ideas’. We will particularly support research and bright ideas that align to the Trust’s Vision and Priorities.

The Department will facilitate workshops and seminars in Research & Innovation; engaging staff, raising awareness and sharing best practice.

We will use the support, guidance and expertise of our partner organisations to help staff develop their Bright Ideas and Research and Development projects.

Work with our partner organisation to seek funding opportunities for both Research & Innovation.

Aim 4: Capacity:

- **To equip staff with the tools, training, support and guidance to deliver high quality translational and applied health services research & innovation, which will directly benefit our patients.**
- **To explore the feasibility of establishing a purpose built, on-site Clinical Research & Innovation Facility (CRIF) allowing centralisation of research & innovation staff & improving our outward facing image to external partners, including industry partners for research & innovation.**
- **To increase funding brought into the Trust from research and innovation grants, industry-sponsored trials and external sponsorship**

Objective 4.1: Support and guide staff with the relevant training and tools to deliver research and innovation.

The Department would like to encourage more staff to become not just research aware, but research active the department will therefore work with staff and ensure they are relevantly equipped to carry out research by;

- Encouraging, supporting and guiding staff members in the completion of Good Clinical Practice and Consent training - which we set as the minimum requirement for carrying out research; to ensure good, high quality facilitation of research.
- Encouraging, supporting and guiding staff and trainee staff who wish to develop their own research projects whether this be NIHR portfolio adopted or not.
- We will have a significant focus on developing our own cohort of Chief Investigators (CIs) within the Trust. At present, the majority of our research work is facilitating NIHR trials based in other units. Along with development of our own CIs, will be a drive to seek external peer-reviewed funding to support delivery of our own research and development and ongoing costs for a planned Clinical Research & Innovation Facility (see below).
- Exploring opportunities for nursing/ allied health professional research secondments to encourage these staff to take up research within their job roles.
- Working with Clinical Directors to include research and/or innovation roles and responsibilities within job plans and job descriptions of new appointments where appropriate.

Objective 4.2: To explore the feasibility of establishing a purpose built, on-site Clinical Research & Innovation Facility (CRIF) allowing centralisation of research & innovation staff & improving our outward facing image to external partners, including industry partners for research & innovation.

Over the course of this strategy we will aim to improve and extend our present research & innovation facilities and continue to explore the potential development of an on-site state-of-the-art clinical research and innovation facility. This would offer a centralised base for all research delivery, innovation and administrative staff and enable us to provide a bespoke, personalised service to our research patients.

Development of a dedicated facility will offer the opportunity to attract both commercial research sponsors and local SMEs. It will provide opportunity and capacity for clinical, academic and commercial companies to interface and collaborate and will potentially facilitate the need to draw in external funding for research and innovation.

A clinical research and innovation facility will strengthen our collaborative relationship with the University of Sunderland, providing us with the capacity to facilitate clinical academic research within the Trust. The capital costs will be explored and options considered.

Objective 4.3 – To ensure income generation to allow increased research and innovation capacity, and to support establishment and ongoing costs of the CRIF

We have successfully applied for small to medium-sized research & innovation grants to support research trials and innovative research development within CHS. As we develop a cohort of our own Chief Investigators, leading their own trial work, the Department of Research & Innovation will offer support in writing grant applications. These will be multi-agency applications, working with external agencies relevant to the specific grant.

Innovation development grants will also be sought, working collaboratively with SMEs and other industry/technology partners

5.0 Priorities for 2016/2017

Research Priorities:

- Build on our specialist clinical research areas that have the ability to be national and internationally recognised leaders; in particularly Ophthalmology.
- Encourage specialities that have strong clinical activity but a small research portfolio to open up research studies; offering their patients the chance to participate in research.

- Develop a cohort of Chief Investigators within the Trust.
- Attract external research funding from competitive funding streams and research calls
- Increase commercially sponsored research activity to allow greater capacity building and a sustainable research infrastructure.

Innovation Priorities:

- Update the Intellectual Property policy and arrange IP workshops to teach staff the importance of protecting intellectual property.
- Create a culture for Innovation across all directorates in the Trust.
- Promote and facilitate non-confidential partnerships with industry that will benefit the Trust
- Nurture relationships we have with SMEs in the region especially Quality Hospital Solutions and Polyphotonix and those that can help us exploit intellectual property that arises from staff within the Trust.
- Attract external funding for Innovation projects and 'Bright ideas'.

Both arms of the Department will liaise closely with partner organisations to realise these priorities.

6.0 Glossary

CRIF: Clinical Research & Innovation Facility. An onsite purpose built facility to centralise research and innovation staff from across the trust. A dedicated space in which to facilitate clinical trials and innovation related activities.

FabLab: An open access creative space to test ideas out and bring them to life-through prototyping. Our local FabLab is at the University of Sunderland.

Intellectual Property: Intellectual Property can be defined as products of intellectual or creative activity in the form of novel ideas, innovation or research and development which can be given legal recognition of ownership through intellectual property rights. Intellectual

Property Rights (IPR) are a commodity that can be bought or sold.

NENC AHSN: The North East and North Cumbria Academic Health Science Network is dedicated to improving healthcare, driving wealth creation and promoting research participation across the region. (<http://www.ahsn-nenc.org.uk/>)

CRN: NENC The NIHR Clinical Research Network: North East and North Cumbria is hosted by Newcastle Upon Tyne Hospitals NHS Foundation Trust. The host is responsible for ensuring the effective delivery of research in the Trusts, primary care organisations and other qualified NHS providers throughout the North East and North Cumbria area. (<https://www.crn.nihr.ac.uk/north-east-and-north-cumbria/>)

NIHR: The National Institute for Health Research is the central Government body leading on NHS clinical research. The NIHR mission aims “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.” (<http://www.nihr.ac.uk/about/mission-of-the-nihr.htm>)

POCT: Point of Care Testing: is laboratory testing or analyses performed in the clinical setting by non-laboratory healthcare professionals.

QHS: Quality Hospital Solutions is a small-medium sized enterprise specialising in the provision of innovative products and process improvements to the NHS and wider care industry. The business is a joint venture between a product inventor, Andrew Turner and City Hospitals Sunderland

7.0 Appendices

Appendix 7.1

Research & Innovation Support

Research within the Trust is supported by a core research team consisting of 4 WTE Research Nurses and 1 WTE Data Manager with a small administrative team comprising of 1 WTE Research management and governance manager, 1 WTE Research Officer and 1 WTE Research Administrative Assistant.

Innovation is supported by 1 WTE Innovation administrative assistant and 0.8 WTE Innovation Manager.

Appendix 7.2

Research & Innovation Governance

Research governance is managed in the Trust through the Research Management & Governance (RM&G) Group. In order to achieve and maintain governance compliance and patient safety, and high standards of patient care, the RM&G group:

- Has an audit programme to internally monitor an agreed % of non-commercial research projects
- Ensures all research is conducted in accordance with the Standards of International Conference on Harmonisation- Good Clinical Practice (ICH-GCP).
- Ensures that Research Standards Operating Procedures (SOP's) are up to date and reviewed when appropriate.
- Monitors Trust performance in recruitment to time and target.

Innovation is governed, managed and facilitated through the Innovation Review Group (IRG). The IRG meet quarterly and its' duties are to:

- Undertake the necessary work to ensure that effective communication is maintained with all interested parties internal and external to the Trust with regards to Innovation or other projects submitted
- Review all submitted ideas/innovations as above

- Provide regular updates to the RM&G and the R&I Executive groups.
- Feedback directly to the Trust's Commercial forum.

Appendix 7.3 (correct at September 2016)

Research Leadership Roles within CHS NHS Foundation Trust

Mr. Kim Hinshaw is Clinical Research Lead for the CHaRGe group (Division 3) and is a member of the CRN: NENC Executive. He is an Honorary Visiting Professor at University of Sunderland, Department of Pharmacy, Health and Wellbeing

A number of our consultants are appointed to Speciality Lead roles within the CRN: NENC:

Mrs Deepali Varma is Deputy Industry Clinical Lead and Specialty Lead for Ophthalmology,

Dr. Peter Carey is Specialty Lead for Diabetes

Dr Yitka Graham (University of Sunderland, Honorary Contract with CHS) is Specialty Lead for Health Services and Delivery Research

Dr. David Coady is Deputy Speciality Lead for Musculoskeletal

Neil Jennings is Sub Speciality Surgical lead for Endocrine and Upper GI surgery