

North West Coast Academic Health Science Network

Annual Report 2014 – 15

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Section 1 – Chair’s Statement

Chair's Statement

This has been a year of building on the work we started in 2013/2014, establishing systems and supporting the development of strong partnerships. We believe that the unique selling point of our region is its ability to work in partnership and collaborate. This has been evidenced by the successful bidding of five of our areas to become Vanguard Sites.

We have been successful in achieving a large number of outcomes across our clinical work streams, with our partners driving forward innovation across the region and improving care for residents, as a result.

These have included:

- reducing the number of devastating strokes by 34
- attracting the 100,000 genomes project into the region to transform healthcare across all patient pathways
- Developing a strong medicines optimisation programme, which will impact on many health conditions across the region and across all sectors
- supporting the development of digital health solutions and patient self-management of long term conditions
- building our commercial offering to small and medium sized enterprises
- establishing key international partnerships from which we can learn lessons and spread good practice

Our representative Board has worked together to support the AHSN's campaigns and to gain assurance of our work in 2014/15. I look forward to an even stronger year in 2015/2016 and much progress in the years ahead.

We are pleased that our work is already having a significant impact, demonstrated by the following testimonial:

"The support of the NWC AHSN has been invaluable in helping us achieve our global ambition for children's healthcare innovation. By combining their networks, expertise and access to funding streams, we have been able to develop at a scale and pace previously only dreamed of in the NHS. In addition to accelerating our own development, it has been an incredible experience to be incorporated into the collective developments of the North West coast region, through events, innovation scout networks and collaborative platforms.

I cannot speak more highly of them and the ideals that they represent. It provides me with the hope that the NHS can replicate its achievements in healthcare equality to become a world leading innovator."

***Iain Hennessey
Clinical Lead for Innovation
Paediatric Surgeon
Alder Hey Children's Hospital***



Gideon Ben-Tovim
OBE
Chair, North West
Coast AHSN

Section 2 – Chief Executive’s Statement

Chief Executive's Statement

The North West Coast AHSN has a vision of:

- Improving population health by reducing variation and equalising access to excellent care
- Promoting a vibrant economy through investment, innovation and sustainability of employment.

During the year, we have worked to achieve our vision through running a number of clinical and supporting campaigns. We have made many achievements across health and social care pathways, including detecting atrial fibrillation and reducing the number of strokes in our region, attracting the 100,000 genomes project to the region, drawing down funding for our partners to support their aspirations. We have also achieved much progress in our commercial programmes, which enable us to promote a vibrant economy. These have included:

- Working with 100 SMEs during the year and supporting 12 with intensive business assists
- Winning the Liverpool City region LEP bid for business support and being established as a preferred provider for Lancashire LEP to provide the same support in 2015/2016.
- Facilitating workshops between small business and procurement departments in NHS trusts and leading on a procurement process on a national level to streamline NHS processes so that innovators can get their products to residents.

We have worked with our partners such as CLAHRC, CRN, charities and external bodies who provide service improvement work so that we have a full offering across the region to impact and improve self-care and care of residents. For the last two years we have delivered an infrastructure investment programme to ensure that the structures within the region are sustainable and support healthcare. This annual plan outlines these funding streams in detail.

Our investments cover children's services, adult services, mental health, business support, self-management of care and the introduction of new jobs into the region.

To ensure our improvements are sustainable we launched our Innovation Scouts Programme. This programme aims to support the introduction of innovations into the delivery and commissioning of services.

Once again, we have set challenging targets for the year ahead due to our continued ability to achieve as evidenced in this annual report. We look forward to working with all our partners to reduce health inequalities and improve safety and efficiency in health and social care.



Dr. Liz Mear
Chief Executive,
North West
Coast AHSN



Section 3 – Overview

Vision and Core Aims

The North West Coast Academic Health Science Network (NWC AHSN) vision centres on two interrelated objectives:

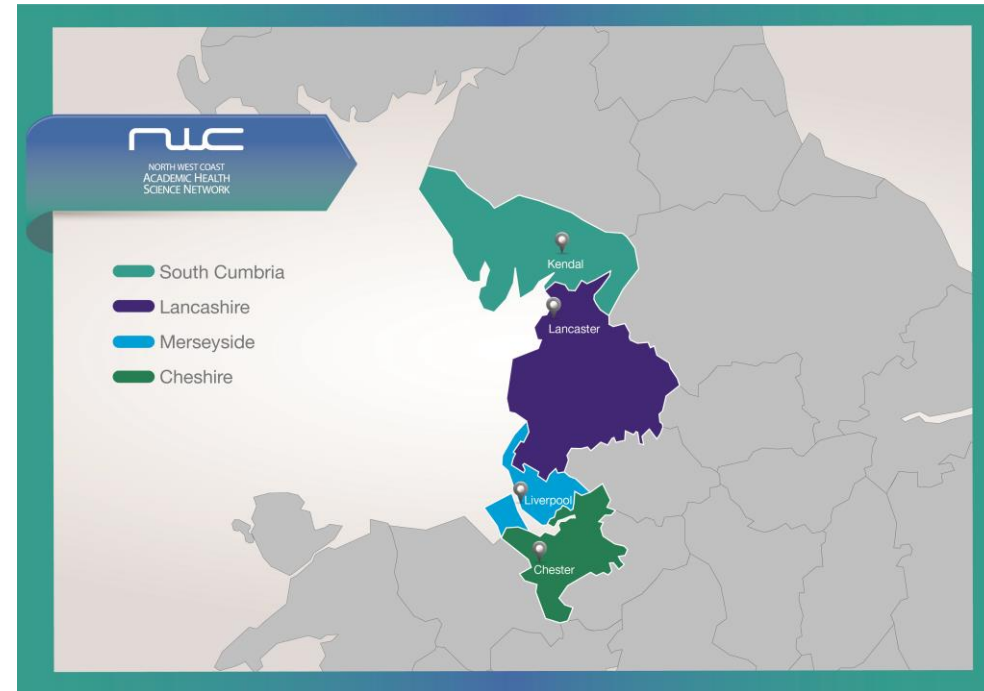
- Improving population health by reducing variation and equalising access to excellent care
- Promoting a vibrant economy through investment, innovation and sustainability of employment.

The AHSN covers South Cumbria, Cheshire, Merseyside and Lancashire. This area has a population size of 4.1 million and is a wide region with vibrant cities, coastline and countryside.

The core aims of the NWC AHSN are to;

1. Drive and enable access to safe, effective, evidence-informed healthcare for the entire NWC population
2. Drive the development and delivery of advanced treatments, technologies and clinical practice across the NWC to enhance the quality and efficacy of service provision.
3. Attract global investment and generate jobs for the NWC.

The AHSN is governed by a Board of ca. 40 representatives from NHS, academia and industry. This Board meets at least 5 times a year and members are expected to attend at least 3 out of 5 meetings to ensure that the AHSN achieves its goals and objectives and complies with all relevant rules and regulations.



Our 2014/15 strategic objectives were to:

- Integrate and build upon established networks and partnerships across NWC
- Establish core Infrastructure to achieve impact and sustainability
- Drive and support the establishment of new innovation campuses as a focus for job and wealth creation
- Establish a NWC framework for selecting and supporting specific business initiatives, aligned to our thematic priorities
- Support the further development and wider implementation of established programmes relevant to our core aims
- Support the growth of developing programmes that will add benefit across our footprint and beyond
- Establish NWC AHSN funding infrastructure
- Establish partnerships with medical charities to advise, inform and support knowledge translation, innovation and horizon scanning within their specialty area
- Participate in and/or lead larger scale regional, national and international events and activities.

In 2014/15 the Network had six clinical priorities which are shown in the diagram opposite. We were also the national lead for telehealth/ telecare/telemedicine; infection; personalised medicine; neurological conditions and procurement.

Cancer

Cardiovascular

Child and maternal health

Long-term conditions

Mental Health

Stroke

The AHSN has adopted the values in the NHS constitution:



In addition, we have developed additional values which reflect the way we work:



Section 4 – Developing the Ecosystem

Membership Engagement

- Events – during the year we have held a wide variety of stakeholder engagement events ranging from the launch of the Patient Safety Collaborative (PSC) to hosting the first 'Lessons from Europe' event in the north, a collaboration with Universities UK and the NHS European Office. We hosted the new NHS England Chief Executive, Simon Stevens for his first experience of AHSNs.
- Consultations – we adopted a systematic approach to commissioner engagement in our Business Plan for 2014/15 to ensure our priorities align with our partners and we add value to the amazing work that is already happening cross the region. We also engaged widely on our initial priorities for the PSC.
- Digital connected health ecosystem – through our quarterly ecosystem events we have brought together health and social care, academia and industry to co-design solutions for a variety of system-wide challenges. One of 25 ecosystems across Europe, the NWC approach was held up as an exemplar model.
- Innovation Scouts play a pivotal role in helping the NHS to lever support and new technologies to improve service delivery and enhance the patient experience. An innovative development programme has been established, with learning and evidence-based approaches from external sectors adapted for local use.
- Knowledge Exchange - We plan to build on our programme of inward secondments as a way of accelerating our work programmes and giving a period of intensive networking and access to the latest innovative approaches, products and thinking to secondees.



Partnership with NWC universities: a strategic approach

The North West Coast AHSN delivers structured engagement and consultations with all 9 NWC universities via each Vice Chancellor. Twice-yearly Academic Summits are held with external speakers to bring together all NWC universities.

Consensus has been agreed that the partnership should focus mainly on 3 core themes (European funding; business engagement; professional and workforce development). Senior academic leads have been identified in each university designated for each theme to enable liaison with the AHSN.

An AHSN Academic Development Officer has been appointed to work with each academic lead and to co-produce a:

- Directory of NWC universities' skills and facilities
- Directory of NWC universities' professional programmes for innovation and leadership
- NWC AHSN universities' website.

In its first year, the AHSN provided tendering opportunities and support for initiatives to enhance infrastructure for health innovation across the region, linked to the AHSNs core themes. This included:

- £150k for the Liverpool Bio Innovation Hub, which will provide incubation space for health related SMEs. Building work has started and the Hub will open in 2015. This is a £20m project and will create opportunities for local businesses and provide new solutions for health.

- £150K for Lancaster University to establish an Entrepreneur in Residence post to support development of the Lancaster Health innovation Campus, which includes a residential 'living lab'. The role includes developing a bid for Regional Growth Funding (RGF) and the longer term business plan for the Campus. In 2014 the University received £17m to progress development (£12m from RGF and £5m from Lancashire Local Enterprise Partnership (LEP). This has also led to a much stronger focus on health for the Lancashire LEP and significant collaboration between the LEP and Lancaster University.



Northern Industry Forum

In 2014 NWC AHSN led the formation of the Northern Industry Forum (NIF). This forum brings together the four AHSNs in the North of England, the Northern Health Science Alliance and industry groups representing both large corporate companies and SMEs across the pharmaceutical, medical technology, diagnostic and biotechnology sectors.

The forum was established to maximise and streamline communication and effective working between the NHS and health-related industries with a location and/or interest in the North of England.

For industry, the primary aims of the Forum are to:

- Help industry to understand the unmet needs of the region and the strategic direction of the NHS
- Provide a forum to align innovation with clinical need
- Ensure faster adoption of proven products
- Provide easier access to the NHS in the North of England, especially for SMEs
- Lower the risks associated with investment in bringing products to the NHS market
- Provide a single facilitation point to solve broader issues for industry partners regarding access, administration and other barriers to progress.

For the NHS the primary aims of the Forum are to

- Ensure the NHS in the North of England has early access to the technologies and products required to deliver cost efficient, clinically effective patient centred care and treatment
- Provide a focus for inward investment in the region
- Understand the remit and capacity of the industries located in its footprint
- Explore opportunities for collaboration
- Ensure an approach to engagement and partnership that is aligned with the health objectives and strategies of our NHS organisations.

"The NWC AHSN has provided uMotif with invaluable support, contacts, advice and funding to help build our work in the North West, and take our product into new clinical areas."

As a fast-growing SME, the AHSN's support has made a significant difference in our growth, and securing clients across the UK and also in the USA."

*Bruce Hellman
CEO / Co-Founder
uMotif*



StartBack

The novel StartBack programme was developed and evaluated by colleagues at Keele University, supported by the West Midlands AHSN, to improve the management of back pain in Primary Care. Its efficacy has been demonstrated in several published studies.

The NWC AHSN's Musculoskeletal expert group is developing a strategy for supporting the implementation of this programme across the North West Coast. This provides an illustrative example of our working with other AHSNs to "import / export" innovative ways of working.

Northern AHSN Forum

This forum, which meets bi-monthly includes all four Northern AHSNs, the four Strategic Clinical Networks, NHS IQ and NHS England North. The forum is used for planning joint work, updating on progress of national and regional initiatives and sharing lessons that can accelerate the progress of work streams that benefit residents, industry and staff.

Well North

The AHSN is a supporter and contributor to the Well North Project, which is funded by Public Health England and local regions. This project seeks to enable a move from a high cost biomedical model to a high value healthcare system. The programme focuses on economic growth and reform across northern local authorities to ensure that its citizens access employment opportunities. This programme sits firmly within this ambition. Well North seeks to improve the health and wellbeing outcomes of individuals and families in our most deprived communities to deliver three strategic goals:

- Addressing inequality by improving the health of the poorest, fastest
- Reducing levels of worklessness a cause and effect of poor health
- Reducing premature mortality.

The overall communication and dissemination of the programme across the North of England will be through the Northern Health Science Alliance working closely with the respective offices of Public Health England, ensuring the programme provides a stimulus and is fully grounded in Local Health and Wellbeing Boards.

Collaborations with other AHSNs – continued

The Northern Health Science Alliance Ltd

The Northern Health Science Alliance Ltd (NHSA) is a new partnership established by the leading Universities and NHS Hospital Trusts in the North of England to improve the health and wealth of the region by creating an internationally recognised life science and healthcare system.

The NHSA links eight universities and eight NHS Teaching Trusts with the AHSNs. Together the Alliance and the four Northern AHSNs cover a patient population of over 15 million people. The NHSA acts as a single portal bringing together research, health science innovation and commercialisation to provide benefits for researchers, universities, hospitals, patients as well as commercial partners.



nhsa
Northern Health Science Alliance

AHSN Network

The North West Coast AHSN takes part in a number of AHSN Network wide meetings including one for Chief Executives/ Managing Directors, Commercial Directors, Directors of Improvement and Communications Leads. These frequent meetings allow the AHSNs to accelerate adoption of innovation, share learning and collaborate on wealth creation initiatives. These groups also spread learning across the country and work on joint projects for the benefit of residents and industry.

The AHSN Network

Collaborations with local organisations and other AHSNs

Patient Safety Collaborative

Patient Safety Collaborative (PSC)

The Patient Safety Collaborative (PSC) is a national initiative set up in response to the Berwick review's (2013) recommendations for patient safety. The PSCs are set up within each of the 15 AHSNs to ensure patient safety remains a number one priority by reducing avoidable harm, saving lives and creating a comprehensive, effective and sustainable improvement system.

Some of the key achievement against our priorities include:

- Clinical Safety Priorities
 - Established clinical advisory groups for each of our four clinical safety priorities identified below:
 - Medicine optimisation
 - Hydration
 - Sepsis
 - Transition of Care.
- Other priority actions
 - Technology reviews to identify solutions to safety issues
 - Setting up learning networks around safety improvement themes
 - Capability Building through workshops and educational programmes
 - Developing safety champions or leads in each organisation
 - Developing a regional strategy on patient safety

measurement.

- Collaborate and support safety programmes both regionally and nationally
 - Pledge to and significant organisational commitment to 'Sign up to Safety' – NHS England National Campaign
 - Ten improvement follows appointed as part of the Q Initiative (formerly known as the 5000 fellows).
- Engagement and Communication
 - Developed and disseminated a Patient Safety Collaborative E Newsletter
 - Developing a Patient and Public Involvement Strategy (PPI) .

Patient Safety Collaborative cluster groups

The NWC AHSN is the Patient Safety Collaborative Cluster lead for Sepsis. The cluster (which involves numerous AHSNs) draws together existing resources such as the evidence base, individuals and/or organisations with a special interest in the priority, and patient, carer or community groups.

This work includes producing an output or "product" that impacts on Sepsis across the health and care system; undertaking a technology review and determining whether there are any specific technologies which could support safety improvements; identifying gaps in the body of knowledge and engaging with local research networks and NIHR to determine the best way to close the gaps; reducing avoidable harms, reducing costs, length of stay and avoidable admissions.

Partnerships with organisations of other designations

LEP Projects

Based on partnerships formed in 2013/14, a number of match funded projects were brokered with the four Local Enterprise Partnerships in the NWC AHSN region for 2014/15.

The AHSN also won the contract to deliver the Business Assist Programme for Liverpool City Region LEP for health businesses.

NIHR Clinical Research Network

The NWC AHSN has supported the NIHR Clinical Research Network (CRN) in working closely with its primary care colleagues to develop research, innovation and improvement capacity. The NWC AHSN support included standardisation of processes and approaches. The CRN and the AHSN have a strong working relationship and this will be strengthened in 2015/16 with a focus on industry engagement.

Strategic Clinical Networks

The AHSN's health innovation priority areas are closely aligned with those of the two North West Strategic Clinical Networks (SCNs). The SCN works to agree clinical pathways with commissioners and AHSNs put these tested pathways into practice. The AHSN has worked with the SCNs in the areas of stroke/ AF, neurological health, cancer and mental health.

NIHR CLAHRC NWC

Research collaborations across industry, academia and the NHS have been further stimulated as a result of the partnership with the NIHR North West Coast Collaboration for Leadership in Applied Health Research (NIHR CLAHRC NWC). The CLAHRC NWC is an important partner for the AHSN. The objectives and outcomes of the AHSN and CLAHRC NWC organisation are closely aligned, and in 2015/16 the AHSN will put into practice the CLAHRC Health Inequalities Action Tool (HIAT). The two organisations have worked together on programmes for neurological health, mental health, genotyping for warfarin use and evaluation of stroke treatments in 2014/15.



NHS England

NHS England are the main funder of the AHSN and assure themselves on a quarterly basis that the AHSN is meeting its duties in accordance with the Innovation, Health and Wealth principles, and in line with the objectives of the Five Year Forward View. NWC AHSN has a close working relationship with NHS England North and the sub-regional teams as well as a strong relationship with colleagues on a national level. The AHSN's vision of reducing health inequalities and contributing to a vibrant local and national economy are consistent with the principles of NHS England.

North West Learning and Development Collaborative

The North West Learning and Development Collaborative includes North West Coast and Greater Manchester Academic Health Science Networks, AQuA, the North West Leadership Academy and Health Education England.

The collaborative works together for the benefit of all its members across the region. This involves planning activities and inputs around safety, leadership, measurement and future workforce, and being a single point of reference and oversight function for the benefit of members.

The collaborative has developed to ensure that there is no duplication of work and to maximise the supportive assets and energy of the organisations involved. Working together ensures that a full complement of support is available for organisations in the region.

Local Authorities

During 2014/15 the AHSN has been active with a small number of Health and Wellbeing Boards (HWBs) and features strongly in the forward plan for the Liverpool HWB. These contacts will be extended in 2015/16 as the AHSN extends its NHS work into more broader activity across integrated care pathways with local authorities and their residents.

North West Healthcare Scientists Network

The NWC has a unique network of healthcare scientists which is consulted frequently by the AHSN due to their natural innovative style.



Key Achievements

Stroke/ Atrial Fibrillation (AF)

- AF Public Awareness raising campaign delivered across Liverpool in 2014
- Genotype guided dosing for warfarin project funding applied for and awarded by the CLAHRC
- AliveCor devices deployed in Warrington, South Sefton, Liverpool, Halton, East Lancs, Greater Preston. Evaluation underway
- Technical review for AF developed and delivered with Greater Manchester, Cumbria and Lancashire Strategic Clinical Network
- Roll out of new prescribing practice
- Delivered workshops for the eCare Pathway with Cheshire and Mersey SCN
- Support to UCLAN in commissioning a Stroke app, to be delivered in Autumn 2015
- Support for South Sefton CCG and MSD to deliver an evidence into practice programme for patients with heart failure
- Support for Cheshire & Merseyside CSU to commission an evaluation for their 'Patients in Control' programme. It is estimated that, by using awareness campaigns, prescribing interventions and the deployment of technology that the above programme has prevented 44 strokes.



"The NWC AHSN has been an invaluable partner to Technomed / MyDiagnostick over the past 9 months. By liaising with key opinion leaders within primary care, they have been able to create awareness not only of the need for AF Screening, but also about our innovative technology which can accurately & automatically screen for AF. This increased market awareness has had a measurable impact on sales. The AHSN has also facilitated introductions to other AHSN's, which has led to a series of local pilot studies with the view to rollout into comprehensive AF Screening programs. Furthermore, by participating in the NWC AHSN locally held events it has allowed us to build a network of contacts throughout the region. "

*Andrew Shute
Commercial Director
Technomed Telemedicine*



Key Achievements

Precision medicine

Precision medicine is an exciting area which is emerging as something which will transform the way we diagnose and treat illness.

A year ago the North West Coast AHSN began supporting our key stakeholders in the development of a bid to become the North West Coast Genomics Medicine Centre. We successfully achieved this designation in December 2014. The process which we utilised included bringing together the key partners and engaging with all levels of clinical teams and academics to effectively collaborate in the implementation of the 100,000 genomes project. The steps required for us to achieve this have required dedication, commitment and input from specialist staff within laboratory settings as well as from clinicians who are caring for patients on a daily basis.

Patients have also been central to delivering this project. We have consulted with our patient representatives so that relevant information is available. We are assured that our workforce has the expertise and the capabilities to be able to fully implement this important project and are working towards transforming diagnostic patient pathways.

The 100,000 genomes project 'went live' at the end of March 2014 and aims to incorporate genetic testing and whole genome sequencing for patients initially with rare inherited diseases and for those patients with a new diagnosis of breast, lung and ovarian cancer. The coming year will see genetic testing being firmly embedded into the aforementioned pathways. The project

is due to finish at the end of 2017 when all local delivery partners will be offering these tests as a routine part of how we treat patients. In addition, the AHSN has funded four clinicians to lead the project (which continues into 2015/16) and the second phase of extending this work will be scoped in 2015/16 when genomics will become a cross-cutting AHSN work stream across all our programmes, recognising that this is future of medicine.



Mental Health

We have successfully engaged with key stakeholders across statutory and voluntary sectors over the year. This has led to the development of a specific programme for innovation around depression which will commence in 2015/16 as well as the introduction of a dedicated assessment tool for vulnerable children and young people.

A particularly good example of how we have added value has been the support provided by the AHSN in establishing a successful partnership between a small local digital company, a mental health provider and an arts organisation in the design, testing and launch of a digital app which supports self-management in young people's mental health. This model of working closely with service users is an example of good practice and will be replicated in other projects.

The focus of our mental health programme has been refined over the past year in partnership with and in response to our stakeholders. We have supported the development and implementation of specific projects as well as engaged widely with organisations within the voluntary sector. Going forward we will be concentrating on improving the knowledge and skills of staff caring for vulnerable young people who are transitioning safely from Child and Adolescent Mental Health services into Adult Mental Health services as part of the Patient Safety Collaborative. We have commissioned Edge Hill University to provide an e-learning package for this group of staff and are looking forward to seeing improvements in knowledge, skills and ultimately care.

We have the basis of a strategy with our stakeholders to develop digital tools which will enable service users to enhance their care and change how they communicate with their medical teams. This is innovation at its best and involves service users at each level of development and consultation.

Workforce Development

- Operationalised our Innovation Scouts programme to support organisational innovation champions, attracting industry and academic leaders (both national and global) to contribute to their development . This programme improves networking and sharing of innovative ideas between Trusts who have developed working solutions to difficult problems
- Oversight of Cheshire & Merseyside workforce project (Forerunner fund HE NW) with a budget of £50k received into the AHSN
- Commissioned a review of NHS staff wellbeing which has highlighted both good practice and additional work which has been prioritised on next year's business plan.



Commercial Engagement and Business Support

- Awarded a tender by Liverpool City Region Local Enterprise Partnership for a business support programme focused on SME engagement for local SMEs
- Established as the preferred provider for Lancashire LEP to provide the very same support in 2015/16
- Lead AHSN for partnership with Proteus Digital Health in the North of England
- Support for SMEs with outcomes leading to SBRI funding, tenders, first customer and revenue, and establish evaluations with NHS partners.

Procurement

- Lead for AHSNs nationally on procurement, developed a 'wish list' of changes to policies and processes nationally and locally that could support adoption of innovation and access for SMEs. Dialogue established with Department of Health to address changes needed
- Sponsored the Excellence in Supply Awards 2014
- Facilitated the bringing together of SMEs and procurement departments from provider trusts
- The Cheshire & Merseyside Procurement Heads of Procurement Meetings are being held at our offices – where we have started to invite a number of companies/SMEs to pitch their products/services.

- Supported an SME to challenge PQQs and tender for two contracts, both of which were awarded



Research / Innovation

- Funding secured from NHS England to develop a joint CLAHRC project on Knowledge Mobilisation
- Support given for Regional Innovation Funding bids (Telemedicine for Paediatric Neurology, Heart Failure App and App for head and neck patients). Projects successfully up and running
- Three workshops delivered to support the development and understanding of innovation in the region
- Support for the delivery of the Sustainability Assessment Framework for the Healthier Lancashire Project
- Support for an NIHR funded project to produce easy to understand research reports, part of a programme to study knowledge exchange through the 'Researcher in Residence' model
- Support for an NIHR funded programme to analyse how the 15 AHSNs are creating networks.

Creating space for innovation

- Established a large board room/meeting room with break out facilities at our headquarters in Vanguard House. This room is free to use for AHSN associated organisations and is increasingly being used by our stakeholders, partners and members to run their events and meet with their staff.

International

- Presented at the World Health Design Forum
- Led a successful study tour to incorporate best practice in interoperability from Austria
- Partner in the 'Stop and Go' project to look at PPI across Europe. The project has developed the European specification template and aims to procure technologies across five economies by the end of the year
- Partner in the digital maze challenge, sourcing a study tour to Sweden for five successful SMEs
- Successful in a European bidding process with AAL for the ENSAFE project which aims to review the process of taking a new innovative product to market with patient and end user experience as a key enabler
- Associate Partner of InnoLife, the consortium successful in being awarded the EIT KIC for health
- Continued our series of quarterly ECHA ecosystem events.



Communications and Marketing

- Developed and established the NWC AHSN brand across all communications and marketing materials, both in print and online.
- Delivered a host of successful events across the North West Coast region (see list opposite), engaging with thousands of stakeholders in the NHS, academia and industry over the year
- Gained a wealth of media coverage regionally and nationally, reaching out to hundreds of thousands of people
- Held 28 regional engagement events covering patient safety, procurement, digital health solutions and innovation culture, bringing partners from the NHS, Industry and academia together forging new collaborations.
- Held our first AHSN celebration event, where our partners shared examples of how the AHSN had supported them during 2014/15. The RT Hon Andy Burnham MP (Shadow Health Secretary) gave the keynote speech and addressed over 400 delegates.
- Chief Executive of NHS England, Simon Stevens, visited the NWC AHSN in May 2014 to meet its executive team and members of the representative board to learn more about the work that the organisation is doing across the region.

Event	Date
Know Your Pulse in Liverpool!	May / June 2014
Academic Summits	June / Dec 2014
NWC Connected Health Ecosystem Events	Jun/Oct 2014, Jan 2015
Prevention of AF Related Stroke: how can we do things better?	July 2014
Digital Futures: Delivering Growth 'Digital Maze'	July 2014
Healthy Apps Workshops	July / Sept 2014
Quarterly Stakeholder Forum	September 2014
Making Innovation the business of everyone	Oct – Dec 2014
North West Coast Genomics Healthcare	November 2014
Procurement of Innovation	November 2014
Innovation Celebration	December 2014
Innovation Scouts events	Dec 2014 / Jan 2015
Seminar with Sir David Dalton	January 2015
Health is Wealth Strategic Conference	January 2015
Beyond Greenspace	January 2015
Science of Yes! conference	March 2015
NWC Patient Safety Network Launch Event	March 2015
Improvement Practitioner: Measurement	March 2015

Key Achievements – continued

One of the barriers to innovation, as outlined in Innovation Health and Wealth is the lack of recognition of innovation. Our Annual Celebration Event was one of our events aimed at addressing this barrier and was attended by over 400 people.



Medicines optimisation (MO)

- Developed a trade-marked MO strategy for the region
- Engaged with local stakeholders to develop priority areas where innovation will improve outcomes in MO, and established work programme for 2015/16.
- Commenced support of an electronic transfer of data from hospital to community pharmacy with a local CCG.
- Disseminated two international technologies across the North West Coast region
- Managed the Proteus technology into the UK with evaluation sites established in Liverpool, Sefton, Lancashire and Newcastle in a variety of healthcare settings and across disease areas. The projects will establish the value of Proteus as a decision support tool and or an adherence support aid. The disease areas under investigation are dementia, hypertension, hypercholesteremia and step down care to support independent living. Obtained inward investment into the AHSN from Proteus.

Fundraising

In addition to the funding sources already outlined, the AHSN has supported organisation achieve the following funding:

- Support for the Lancashire Digital Strategy application for Tech Fund 2 monies- successful in securing £1million.
- Support for the Transformation Challenge Award - Development of a commissioning collaborative across six Local Authorities to improve commissioning of complex care services for adults with learning difficulties / complex mental health, implementation of assistive technologies and transformation of direct care payments for care – successful in securing £765,000
- Support for the application to become the North West Coast Genomics Medicine Centre (GMC) to deliver the regional element of the national 100k genome project – successful in securing £1.1 million
- Successful in gaining Ambient Assistant Living funding stream for the ENSAFE project, securing £84,000.



Digital health

- Working with the European Connected Healthcare Alliance (ECHA), the AHSN has developed a region wide ecosystem to enable better connected health and economy growth through digital innovations. This work is linked to a further 24 ecosystems across Europe which has offered the region the opportunity to develop at pace through sharing and learning of best practice
- As part of the ecosystem work, the AHSN has developed a connected health working group which consists of key regional leaders who meet every six weeks to drive the work forward
- The AHSN has developed clear definitions for the tele-health work and learning has been spread from a number of innovative projects including the Blackpool tele-swallowing service, Lancashire Teaching tele-renal work , and the Mi (More independent) tele-health and tele-care programmes in Liverpool , which is a European reference site for active and healthy ageing and also the area in Europe with the largest deployment of health technology in Europe (EU Commission's Research Unit)
- Collaborative working with Cumbria University and CSC (a global leader in providing technology enabled business solutions and services) has led to the development of a Tele-health Readiness Tool which supports organisations and health economies to assess their level of readiness. This tool has received regional, national and international interest
- Our digital health programme will become an underpinning theme in 2015/16 as we incorporate digital methods of delivering healthcare into all pathways.

• Interoperability

- The AHSN has supported programmes to improve interoperability and the flow of electronic information across care pathways to front line staff, patients and carers
- Support has been given to the North Mersey iLINKS Programme. This programme is an enabler to commissioner and provider transformation strategies, supporting the move to a culture clinical information is shared by default. A key priority for the programme is the development of a scaled sharing and information governance model for the whole economy which will be enabled by a digital interoperability roadmap.
- The AHSN has also supported LPRES (Lancashire Person Record Exchange Service) programme, which is an innovative solution breaking new ground in the NHS with the introduction of an 'on demand' model to sharing information. The scalability of this approach means information can be exchanged both within and across a region.



Infrastructure Development

There has been limited infrastructure in the North West Coast region to support early stage companies in the health and life science sectors, and existing facilities were not linked to health service provision. North West Coast AHSN provided £856,000 of funding to a number of partners to support the development of the following facilities:

- Medtech innovation centre and Living Lab residential park at University of Lancaster (first phase underway)
- Liverpool Bio-Innovation Hub at University of Liverpool (due for completion in 2015)
- Alder Hey Research and Education Centre
- Alder Hey Innovation Centre for Sensor Technologies (first phase underway)
- Cheshire Innovation and Research Centre (first phase underway)
- Accelerator Hub, Royal Liverpool & Broadgreen University Hospital Trust (build underway)
- Employment and Enterprise Hub within the Mersey Care Centre for Recovery and Social Inclusion (in the planning stage)
- Scoping project and ongoing support for the Chorley Digital Park.

The AHSN's commitment and support has given confidence to others to invest. Collectively these projects have secured over £55m additional funding from sources including the NHS,

universities, industry, EU and government funding.

The AHSN is providing ongoing support to secure funding and shape strategies, as well as to SMEs who locate within the facilities to drive development and adoption of new healthcare technologies.

These investments will establish a sustainable regional infrastructure, creating jobs, developing skills and attracting research funding and inward investment over the long term. The potential is there to drive significant economic growth to the region in the coming years.

The AHSN has provided infrastructure funding across the region. At Alder Hey NHS Children's Foundation Trust we have received two awards of infrastructure funding. The first award was for our paediatrician Research and Education Centre and the second one for our Innovation Centre, which will be a national and international centre of excellence for developing new innovative approaches for children's care and treatment.

The monies from the AHSN have allowed us to gain match funding and ensure that both projects are successful.

Our ambition to be an international centre of excellence in developing healthcare solutions for children has been accelerated by the support of the network.

Louise Shepherd

Chief Executive, Alder Hey Children's Hospital



Section 5 – Delivering Patient and Population Benefits

North West Coast Patient Safety Collaborative

In September 2014, the NWC AHSN held a key stakeholder engagement event where a series of priorities and principles were agreed that would underpin the North West Coast Patient Safety Collaborative activities. These are summarised below:

Core Principles

- Safety in everything' culture – staff at every level and in every role have something to contribute to safety
- All sectors represented (e.g. mental health, learning disability, community/primary care; care homes and social care organisations)
- Build on and improve what already exists (provided it is fit for purpose, and has demonstrated that it can add value)
- Promote digitally enhanced/enabled systems to aid data collection and analysis
- Multi – professional approach

Clinical Priorities

- Medicines Optimisation
- Management of Sepsis
- Transition between paediatric and adult care
- Hydration- Including Acute Kidney Injury

Priorities for Action

- Providing Board level development in safety
- Providing safety training and development to staff working at patient care level
- Agreeing a regional policy on patient safety
- Setting up learning networks around safety improvement themes
- Developing safety champions or leads in each organisation
- Technology reviews to identify solutions to safety issues

Atrial Fibrillation campaign

Atrial Fibrillation (AF) is the most common sustained cardiac arrhythmia. It is a major risk factor for stroke, and when strokes occur in association with AF, the patients suffer increased levels of mortality, morbidity and disability. AF is easily detectable through a pulse test.

The AHSN delivered an awareness-raising campaign in Liverpool in 2014 and are running a similar event in 2015 in Lancashire. These multi-partnered events are supported by the European Brain Council, the Stroke Association, the Atrial Fibrillation Association, Healthwatch, Heartbeat, Liverpool Health partners, Age UK, local NHS Trusts, and the British Heart Foundation. Local football clubs and organisations were involved.

This workstream overlaps with our Medicines Optimisation Programme and we have helped support CCGs and pharmacists work effectively with companies who make Novel Oral Anticoagulants (NOACs). An example of this is in West Lancashire, where the AHSN supported the CCG and Bayer in getting a consortium together to fund an improvement project working with GPs. Wirral CCG is also looking at ways of increasing NOAC prescribing. Another example is work we are doing with East Lancashire CCG and Roche to help optimise use of warfarin and offer patients more

choice with self-monitoring. By improving medicines optimisation in a number of ways, we have the potential to reduce the number of strokes caused by AF by 5% over the next two years. Further impacts will be achieved as time goes on and projects become more mature.

A 5% reduction means that about 26 strokes per year are avoided with 9 less deaths in our area per year. This is achieved by our campaigns and activities in this area. The cost of a stroke is £12,000 per year, so we are reducing the NHS spend by approximately £312,000 per year.

The campaigns were a great success – measureable outcomes included:

- Potentially preventing 19 strokes through irregular pulses identified at our campaign and another 35 prevented through our medicines optimisation programme
- Raising awareness of the issue with an audience of over 5,000 through media coverage
- Over 550 pulses tested at nine events
- Encouraged dialogue through workshops and events
- Using new technology for testing including AliveCor product and diagnostic sticks.



Delivering Patient and Population Benefits – continued

North West Coast Connected Health Ecosystem

The North West Coast Ecosystem (developed in conjunction with the European Connected Healthcare Alliance) brings together representatives from the NHS, local councils, academic organisations and industry – helping them to work together to tackle health challenges by encouraging the uptake of connected technological healthcare solutions.

Four quarterly events have been held attracting more than 700 people in total. The ecosystem allows people working in the NHS, councils, business and academia to access a diverse, skilled network and benefit from the resulting synergies and partnerships.

Event topics covered include:

- International case study examples from health and business
- Patient centred data exchange
- Integrated care
- Supporting the NWC region to achieve improved self-management for our populations using digital innovations
- Interoperability
- Self-management.

As a direct result of engagement with the Northern Ireland ecosystem, we have created an innovative collaboration with Northern Ireland and the Netherlands to introduce new technologies in the field of Medicines Optimisation to the region.

This will reduce unnecessary spend on medicines by an anticipated £500,000 and more importantly will ensure that prescribing is safer, and GPs and hospital doctors have more confidence in prescribing decisions.

NWC AHSN has had massive success in engaging SMEs, linking with NHS and Academic partners, leading to a range of new European connections and collaborations.

We have championed this approach amongst the other 14 AHSNs, with three others now running connected ecosystems and gaining recognition from the European Office of the NHS Confederation and Universities UK for system leadership. Liverpool, our European reference site for Active and Health Ageing, is the first city outside London to host two 'lessons from Europe' events with eminent international speakers.



Medicines Optimisation

Medicines are the most widely utilised medical intervention for patients, accounting for approximately 10 percent of the NHS budget. The Royal Pharmaceutical Society best practice guidance for Medicines Optimisation (MO) outlines key principles to ensure that the true value of medicines across the care pathway can be optimised to improve clinical outcomes for patients.

The NWC AHSN strategy for medicines optimisation supports these principles and focuses on how innovative practice, products and technology can be identified, evaluated and adopted across our patch.

Working closely with the Northern Ireland health economy, NWC AHSN is evaluating a methodology developed in Europe called STEPSselect. This is the safe, therapeutic, economic, pharmaceutical selection of medicines. This approach (when adopted in Northern Ireland) has realised benefits for patients and clinicians, offering a transparent and inclusive process to aid decision making aligned with NICE guidance. If the evaluation demonstrates similar benefits within the English NHS system we are the lead AHSN to share outputs across the country.

The NWC AHSN is also exploring the role of assistive technology using robotic dispensers and adherence aids to ensure medicines are optimised across a population group. The project is aimed at elderly patients living at home to help keep them safe and well at home.

In addition the NWC AHSN is supporting the spread of electronic

discharge information from hospital to community pharmacy and an based initiative that utilises the community pharmacy to ensure the safe transfer of patients between settings. We are working with both health economies across the footprint and the AHSN network to share learning and drive diffusion.



Natural Health Services

The AHSN has played an integral part in supporting the Natural Health Service, which is a social enterprise consisting of 21 organisations who have come together to create a venture using natural environmentally based products to improve the health and wellbeing of both individuals and communities. It offers a single point of access to a range of evidence-based products to support commissioners of services and a wealth of information to assist in the development of public health plans. Moving forward the group is working towards becoming a national centre of excellence.

Earlier this year we held a tree planting ceremony with children at Westfield Primary School, Runcorn. Planting trees is one way we mark our achievements and leave a long term legacy by adding to the 9 million trees already planted by The Mersey Forest.

Trees and woodlands provide a wide range of important benefits, many of which go unnoticed. Importantly trees and woodlands have well evidenced health benefits: improving air and water quality; providing places to exercise or relax; and simply helping to make us feel better.

The children regularly participate in an Scandinavian developed concept – the Forest School. Forest School delivers the national curriculum outdoors and helps children build their confidence, improve their teamwork and practical skills (including building dens, knot tying and making art with natural materials), as well learning more about the environment. All sessions are

supported by trained Forest Rangers.

Westfield Head Teacher Claire Dawes said “Forest School is an important part of our curriculum. The sessions help to improve children’s confidence, interpersonal skills and knowledge of the natural world. It is great to be able to work with the Academic Health Science Network too and celebrate their success!”

The Mersey Forest has been working to deliver a long term plan to get ‘more from trees’, to use new planting and existing woodland as a mechanism to gain social, environmental and economic benefits.



Innovation hubs

In 2013/14, NWC AHSN invested into two innovation hubs across the North West Coast region. £150,000 capital investment was invested into infrastructure at Liverpool Bio-Innovation Hub. The Hub aims to stimulate growth in the bio-medical sector. It will be a world-class incubator for regional bio-medical SMEs, combining laboratory workspace with access to on site sector specific specialist services, facilities and expertise. The project seeks to create 200 FTE jobs, assist 29 businesses and engage 29 businesses in new collaborations with the knowledge base.

In addition, the AHSN has invested £160,000 into Lancaster University Innovation Hub by funding an 'AHSN Entrepreneur-in-Residence', for two years, to help develop the Innovation Hub. The AHSN ER has been working to explore links and integration between the Hub and other initiatives in other parts of the NWC footprint. The role has also involved working with venture capitalists and other potential benefactors and funders to explore their involvement in the Innovation Hub, and to establish new models for supporting local innovation in health and medicine.

The Hub will be a space for developing research, education and knowledge exchange around health and medicine. There will be an innovation hub for SMEs and others to interact closely with academics.



Big data

The NWC AHSN has invested £250,000 into the Liverpool Big Data Collaboration for Health (LBDCH) - a partnership between two universities, the 13 NHS organisations in Liverpool Health Partners and across the Liverpool CCG area. This was to create a jointly owned big-data informatics facility dedicated to realising the full potential of big data for operational, clinical and research purposes - all centred on improving health outcomes.

In addition, the NWC AHSN has invested £250,000 into the Lancashire Patient Record Exchange Data Collaborative (LPRES) which aims to create a single, integrated care record view accessible across all care settings. The technology enabling this will securely share clinical data between local systems, either as a summary view or as a structured message exchange.

In a bid to drive efficiencies and improve services through data sharing, the NWC AHSN is supporting these two projects by running a steering group. The steering group has been working to oversee and enable the sharing of information and data across the two organisations. The group has also implemented solutions and support plans to use consented information which has been gathered by the Liverpool Big Data Collaboration and LPRES when researching how health and social care services could be improved, and making plans to future-proof services in the region.



Section 6 – Delivering Efficiency and Supporting Enterprise

Supporting Local Enterprise Partnerships

NWC AHSN is actively engaged with the three local enterprise partnerships in the region.

Match funding was provided to Cheshire and Warrington LEP to develop a strategy for the health and life science sector following the departure of Astra Zeneca from East Cheshire. With the development of the Thornton science campus and the establishment of a Health Hub and Innovation Centre, (a collaboration between The Countess of Chester Foundation and Chester University, supported financially by NWC AHSN), the LEP is now engaged in identifying opportunities for growth within the health and life sciences sectors.

Liverpool City Region (LCR) LEP and NWC AHSN have jointly funded a life science and health sector specialist, working for both organisations, to engage with industry partners and accelerate growth of this sector. We also co-funded the development of an umbrella brand for a Health Enterprise Hub which brings together the Liverpool City Region LEP, NWC AHSN, Liverpool Health Partners (includes NHS and academic organisations in Liverpool City Region) and the Cheshire and Merseyside SCN.

LCR, LEP and Liverpool CCG also co-fund a programme to develop an eHealth SME cluster in Liverpool and NWC AHSN is actively involved through the steering group.

Through a tender process, LCR LEP chose AHSN as the delivery partner for their Business Assist Programme. The 'New Markets

Programme' will engage with healthcare SMEs in the region to offer bespoke workshops on topics such as; NHS structure and organisation, commissioning and procurement, evidence base, and health economics. The delivery team will also be providing:

- Guidance for new product development
- Evidence gathering
- Focus groups
- Access to potential customers
- Meetings with commissioners/procurement lead.

A similar scheme has been agreed with Lancashire Enterprise Partnership as part of their BOOST programme. This is delivered by NWC AHSN and funded by both organisations.

The programmes are in their infancy but the newly created sector post, inward investment, marketing activities and the business assist programmes will drive the establishment of new businesses, attract established companies to the region, grow existing businesses and further develop a skilled workforce, with the key anticipated outcome being an increase in investment and jobs, within the sector and across the region.



SME business assists

We have engaged with over 100 SMEs during the year and supported 12 with intensive business assists.

The business assist programmes established with Liverpool City Region and Lancashire Local Enterprise Partnerships will enable the commercial team to engage with 30 SMEs in 2015/16. Supporting testimonials from businesses we have worked with are included below:

"The Leanvation team found ourselves struggling to navigate and understand the complex decision trees associated with the procurement of surgical gloves within NHS Trusts following the commercial launch of the business in 2014.

Gaining an introduction to the North West Coast AHSN team proved a game changer for Leanvation. Not only did NWC provide crucial support in making introductions to key NHS procurement staff, but they provided credibility to our proposals to NHS Trusts, having already undertaken their own due diligence of the Leanvation value proposition. Most important of all however was the support that NWC provided concerning our application to feature on at least two national NHS procurement frameworks."

Dr. Jonathan Day
Managing Director
Leanvation



"Med ePad is a Merseyside based Healthcare software start up business with all of the challenges that go with such a business, not least the ability to access the right people within the NHS. We have been working with the North West Coast AHSN for nearly 2 years, in that time we have engaged in a number of conferences organised by the AHSN and through this made many more contacts within the NHS. The AHSN has also been instrumental in coordinating meetings between the academic community, NHS and SME's from which we have benefited from significantly.

Additionally the AHSN introduced us to the SBRI competition for Mother and Infant non-invasive sensors which we are pleased to say we won, this in many ways was based on the introductions made by the AHSN to Alder Hey Children's Hospital in Liverpool. The support of the AHSN during the bid process and the project itself has been exemplary and hopefully we will see a positive outcome from the project and success in phase 2 funding.

We will continue to work with and support the work of the AHSN as they have proved over the past two years to be an invaluable resource to help gain access to NHS resources and thought leaders in the industry."

John Hopkins
Chief Executive Officer
Med ePad Ltd



“NWC AHSN have supported us over and above our expectations throughout the last 12 months. Their team are thought leaders in their fields and are super connected to the NHS and academic sector. Health is the main sector we work in, our acceleration as business owes a huge amount to the great work of NWC AHSN. They have empowered us with knowledge of the health sector and have been a guide to the often difficult to understand structures and approach of the NHS to someone not used to working in the sector. Over the last 12 months our turnover has increased 380% and 10 jobs have been created.

We are working with 4 NHS Trusts as a direct introduction through Dr Julia Reynolds, Dr Liz Mear and Lorna Green, or a via a platform provided by a NWC AHSN ecosystem event. We are working with The Walton Centre R&D on 2 projects, one that uses our sensor technology to reduce the amount of people being sectioned following neurological trauma and another that empowers outpatients by connecting them with data relating to their medical issues. We are working Alder Hey Children's Hospital to develop technology to be used in a neonatal setting. We are working up a demonstration with The Royal Liverpool University Hospital to deploy our sensor technology in a setting to aid staff and increase safeguarding with the new building being single room occupancy. We have got to the final stage of an Innovate UK bid working with North West Ambulance Trust to empower ambulance drivers through real time data and reduce response times.

We worked with NWC AHSN to submit an SBRI bid, which although was unsuccessful the knowledge that NWCAHSN provided from a clinician perspective, enabled us to pivot our designs to suit the hospital and rehabilitation environment.

NWC AHSN have connected us to stakeholders in academia, we connected with Lancaster University, through NWCAHSN and have just completed an EU Horizon 2020 bid, which if successful will enable us develop our IP and get it closer to market readiness. We are also working with Cumbria University on a separate IP development project, which came through an introduction through a NWCAHSN event. Chair Gideon Ben-Tovim OBE, recently introduced us to Professor Munir Pirmohamed, NHS Chair of Pharmacogenetics at University of Liverpool, who we are now collaborating with to leverage our expertise in mobile technology to improve clinical surveys. “

Lee Omar
CEO
Red Ninja Studios



Proteus Digital Health

NWC AHSN seconded a project manager to Proteus Digital Health. This post holder works with Proteus on a programme of engagement with local healthcare providers to evaluate an innovative device for measuring compliance with medication. Following a 6 month programme it became evident that the device was generating significant interest and it was time to move beyond collecting performance data and to focus on generating the clinical and economic data needed to advance adoption of Digital Medicine. As such NWC AHSN was appointed as the lead partner to deliver a programme across 3 clinical areas (Hypertension, Diabetes and Hypercholesterolemia) to evaluate the clinical and health economic benefits of Digital Medicine.

The Proteus offering includes an ingestible pill and a wearable patch, and tracks when a patient has taken medication and how they are responding to therapy. In addition to this the device monitors physiological responses and behaviours. The Proteus offering enables more informed clinical decisions as it becomes clearer for the physician to differentiate between non-adherence and lack of response (i.e. the technology can identify whether it is a compliance issue or an efficacy issue).

NWC AHSN has worked in partnership with Proteus to develop clinical protocols, stakeholder mapping exercises and direct contact with targeted NHS organisations to build a network of 'first adopters' that could initially evaluate new technologies with the intent of subsequent advocacy based upon potential successes delivered.



Innovation Infrastructure Funding

There is limited infrastructure in the NWC region to support early stage companies in the health and life science sectors and existing facilities are not linked to health service provision. Over the last 18 months NWC AHSN has provided funding to a number of partners to support the development of the following facilities:

- Medtech innovation centre and living lab residential park at University of Lancaster (first phase underway)
- Liverpool Bio-Innovation Hub at University of Liverpool (due for completion in 2015)
- Alder Hey Training Centre (in place)
- Alder Hey Innovation Centre for Sensor Technologies (first phase underway)
- Cheshire Innovation and Research Centre (first phase underway)
- Accelerator Hub Royal Liverpool & Broadgreen University Hospital Trust (build underway)
- Employment and Enterprise Hub within the Mersey Care Centre for Recovery and Social Inclusion (in the planning stage).

NWC AHSN provided £856,000 to these projects. The total amount of funding secured by the projects is over £55m and in some cases it was the AHSN funds that enabled partners to secure match funding.

NWC AHSN has catalysed many of these projects and we will provide ongoing support as required to secure further funding and shape strategies once the facilities are operational. We will also deliver support to the SMEs located within the facilities to drive development and adoption of new healthcare technologies.

Given the diversity of the infrastructure projects funded, all aspects of innovation, health and wealth will be impacted. The facilities will foster collaboration between SMEs, NHS and academic partners as the facilities are co-located on partner sites with partner provided facilities and / or funding in all cases.

These projects have required a relatively modest amount of funding but have the potential to deliver significant economic growth to the region in the coming years. These investments will establish a sustainable regional infrastructure, creating jobs, developing skills and attracting research funding and inward investment over the long term. The commitment and support of the AHSN has given confidence to others to invest and match funding has been secured from the NHS, universities and industry in addition to EU and government funding.



Delivering efficiency and supporting enterprise

In March 2014, the NWC AHSN awarded £1.1 million funding to organisations for the implementation of infrastructure to aid innovation. The funding will help applicants to develop and install infrastructure which will smooth the way for the uptake of new systems and programmes, and improve efficiency and innovation in health and social care delivery.

The AHSN has approved funding applications from 15 organisations across the patch. Bids came from NHS Trusts, CCGs, Local Enterprise Partnerships, Local Authorities, and Universities, which were all eligible to bid for the funding. Successful applicants include: Liverpool Clinical Commissioning Group, Alder Hey Children's Hospital, Lancashire Care NHS Foundation Trust, the University of Cumbria, and South Ribble Partnership.

Initiatives supported through this scheme will enable the development of large-scale, multi-partner infrastructure to support health innovation, and or job creation, across the North West Coast. Many grants are match-funded and progress is monitored by the AHSN board to ensure successful delivery.

Alder Hey Children's Hospital was awarded £280,000 to fund the internal fit out of a new innovation hub which is set to be constructed. Incorporating a hospital 'living lab' and co-creation space, the hub will be used for testing and training, with potential for international partnerships including Boston Children's Hospital.

Liverpool Clinical Commissioning Group has been awarded £136,000 to install an aggregator which will enable new digital technologies to link to and access the Trust's NHS IT infrastructure; creating benefits for the NHS and SME suppliers. Mersey Care

successfully bid for £125,000 which will fund the development of an Employment and Enterprise Hub within the organisation's new Centre for Recovery and Social Inclusion. The hub will be accessed by service users, carers, staff and the public. It will integrate existing models of vocational support and engage local employers, entrepreneurs, the voluntary sector and the local community.

The 'Connecting Care across Cheshire Pioneer Programme' which brings together two councils and four CCGs to efficiently deliver integrated care has been awarded £100,000. While the Cumbria CCG has been allocated £115,000 which will go toward the implementation of software which will help to address patient flow problems in South Cumbria and North Lancashire

"The support of the NWC AHSN has been invaluable in helping us achieve our global ambition for children's healthcare innovation. By combining their networks, expertise and access to funding streams, we have been able to develop at a scale and pace previously only dreamed of in the NHS. In addition to accelerating our own development, it has been an incredible experience to be incorporated into the collective developments of the north west region, through events, networks and collaborative platforms.

I cannot speak more highly of them and the ideals that they represent. It provides me with hope that the NHS can replicate its achievements in healthcare equality to become a world leading innovator."

Iain Hennessey
Clinical Lead for Innovation
Alder Hey Children's Hospital



SBRI Healthcare Programme

Five companies from the North West Coast AHSN have been successful in being awarded funding to develop their innovative products to address known NHS challenges (see table below).

The local firms joined 11 other applicants from the North West Coast (competing against 381 in total) when they applied to the SBRI Healthcare programme which backs the development of new technologies for known healthcare challenge.

The SBRI Healthcare programme is run by all the AHSNs and leading clinicians from the North West Coast network were part of the selection and assessment process. North West Coast is also drawing up the challenge for the Spring 2015 SBRI Healthcare call.

Melton Health Care Technologies Ltd	Southport	£100,000	Developing a web based process for building a personalised Life Plan with 'elements' for health, care, education, employment, accommodation for people with Learning Disabilities.
BioSensors Ltd	Liverpool	£100,000	Developing wireless non-invasive sensors to track physiological signs and biochemical markers for paediatric acute care.
University of Central Lancashire	Preston	£100,000	Developing an external device that is able to predict the likelihood of a urinary incontinence event prior to it happening and arouse the person from sleep in order to avoid an involuntary incontinent episode.
Digital Creativity in Disability Ltd	Liverpool	£100,000	Developing monitoring sensors in a waistband that warns users when they are about to have an incident of bedwetting, and they can instead remain dry.
Cadscan Ltd	Chester	£99,785	Developing a cost-effective system for making tailored insoles to prevent ulceration without wait for people with diabetes.

Section 7 – Performance Highlights: Case Studies

Innovation Scouts

The aim of an Innovation Scout is to encourage a culture of innovation within their organisation and to promote and encourage the adoption of evidence-based innovations, integrating it as a core process and embedding in staff behaviours.

Individual organisational leads often talk about feeling isolated and without access to the relevant tools/approaches to assist them in becoming successful leaders of innovators.

The NWC AHSN Innovation Scouts Programme was launched in December 2014 and the initial co-hort consists of some 35 NHS innovation champions, each nominated by their CEO and selected for their personal attributes rather than current job role.

Every Scout has committed to:

- Actively support their organisation in creating a culture where innovators are supported and innovations grow;
- Seeking out opportunities to promote the spread of evidence-based innovations;
- Attending at least 2 events (in addition to the quarterly meetings) per year;
- Being able to provide evidence of their work as a Scout (e.g. organisational articles, workshops etc)
- Encouraging colleagues to incorporate innovation into their own practices.

In addition, they will be expected to demonstrate they carry out this role, demonstrating each of the agreed scout values namely: being

curious, courageous, empowering, valuing people and being outcome focused.

The AHSN is providing leadership of this co-designed programme which increases capability in the NHS through creating engagement with academia and industry in a bespoke development programme. This included peer support and, in collaboration with other AHSNs, access to world class thought leaders and companies recognised for their innovative culture.

The AHSN will facilitate delivery of the four core work programmes:

- Appointment of industry and academic innovators
- Creation of a range of measure of success for the role of a Scout
- Delivery of the co-designed development programme
- Design of an Innovation Scout recognition scheme.

"The Innovation Scout Programme has been instrumental in bringing together a diverse and rich mix of staff from across the system to facilitate the sharing of best practice in using technology and new ways of working to embed innovation as everyone's business"

*Maria Thornton
Lead for Research,
Development and Innovation
The Walton Centre
NHS Foundation Trust*



Infrastructure Development

There has been limited infrastructure in the North West Coast region to support early stage companies in the health and life science sectors, and existing facilities were not linked to health service provision. North West Coast AHSN provided £856,000 of funding to a number of partners to support the development of the following facilities:

- Medtech innovation centre and Living Lab residential park at University of Lancaster (first phase underway)
- Liverpool Bio-Innovation Hub at University of Liverpool (due for completion in 2015)
- Alder Hey Research and Education Centre
- Alder Hey Innovation Centre for Sensor Technologies (first phase underway)
- Cheshire Innovation and Research Centre (first phase underway)
- Accelerator Hub, Royal Liverpool & Broadgreen University Hospital Trust (build underway)
- Employment and Enterprise Hub within the Mersey Care Centre for Recovery and Social Inclusion (in the planning stage)
- Scoping project and ongoing support for the Chorley Digital Park.

The AHSN's commitment and support has given confidence to others to invest. Collectively these projects have secured over £55m additional funding from sources including the NHS,

universities, industry, EU and government funding.

Stroke/ atrial fibrillation

In 2014/15 we have run a number of events aimed at reducing stroke due to Atrial Fibrillation. These are described in the Delivering Patient and Population Benefits section of this report.

The campaigns were a great success – measureable outcomes included:

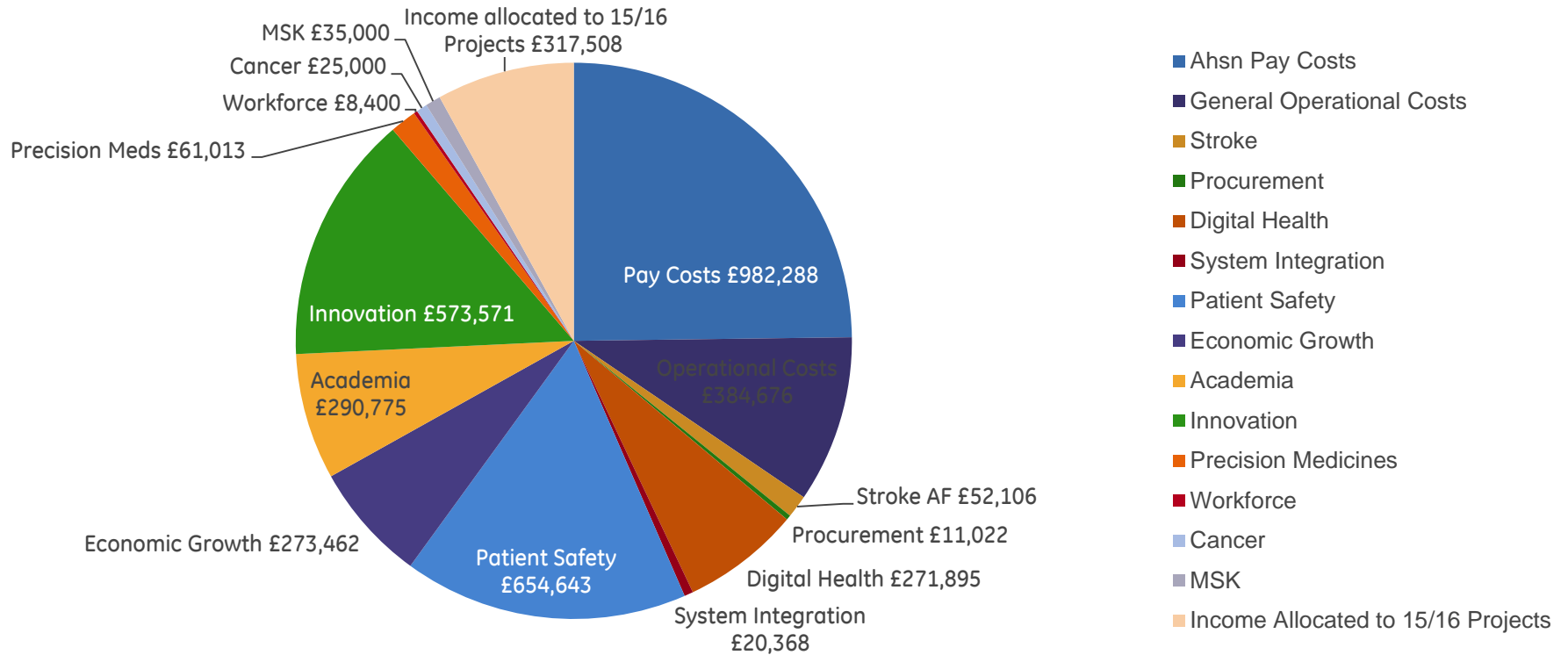
- Potentially preventing 19 strokes through irregular pulses identified at our campaign and another 35 prevented through our medicines optimisation programme
- Raising awareness of the issue with an audience of over 5,000 through media coverage
- Over 550 pulses tested at nine events
- Encouraged dialogue about managing the condition, with clinicians and local residents through workshops and events
- Using new technology for testing including AliveCor product and diagnostic sticks.

Section 8 – Financial Report

The financial report provides a high level summary of how public funds have been deployed to build the partnership platform and, furthermore, how funds have been allocated against the networks strategic priorities.

The AHSN has achieved a breakeven position for 2014-15. £317,508 of NHS England funding has been deferred into 2015-16 and has been allocated against the work streams in our business plan.

The following pie chart shows how the AHSN have used the funding this financial year.



Appendix 1 – AHSN Team

The NWC AHSN team



Dr Liz Mear **Chief Executive**

Dr Liz Mear is the Chief Executive of the AHSN. Prior to joining the AHSN, Liz was Chief Executive of the Walton Centre NHS Foundation Trust, and Chair of the Cheshire and Merseyside Comprehensive Research Network. Liz chairs the North West Procurement Development Board and sits on the national Health Services Research Network Board and the National Patient Safety Collaborative Programme Board.

Gideon Ben-Tovim OBE **Chair**

Gideon Ben-Tovim is Chair of the AHSN, having previously served as Chair of the Liverpool NHS Primary Care Trust and Chair of NHS Merseyside. He is also Chair of Nature Connected, the Liverpool City Region Local Nature Partnership.

Bruce Ash **Vice Chair**

Bruce has spent most of his career in the healthcare sector, initially working in a variety of corporate marketing and strategic roles prior to taking on a number of MD, CEO and non executive positions as well as being active in several UK and European Medical Industry Trade Associations.

Lisa M Butland **Director of Innovation & Research**

Lisa Butland is the Director of Innovation and Research at the AHSN. Prior to this role Lisa worked at NHS England where she was instrumental in the establishment and development of all 15 AHSNs

making England the first country in the world to have universal coverage of AHSN-like organisations.

Professor John Goodacre, MD PhD FRCP **Medical Director**

John is Professor of Musculoskeletal Science at Lancaster Medical School and Co-Director of Lancaster University's *Collaborative Partnerships in Health and Medicine* initiative, which supports strategic partnerships between the University, the NHS and a wide range of public and private sector organisations.

Lorna Green **Commercial Director**

After starting her career as a dietitian in the NHS, Lorna went on to work in the healthcare industry for 17 years in a variety of senior management and board level positions spanning start-ups to multi-nationals. Lorna has also worked for Merseyside Special Investment Fund and as an independent business consultant.

Aly Hulme TD LLM MSc RM RGN **Associate Director - Patient Safety Collaborative**

Aly Hulme is the Associate Director for the Patient Safety Collaborative (PSC) within the AHSN providing the leadership for the PSC Programme with the aim to create a comprehensive, effective, and sustainable collaborative improvement system that will support the development of a culture of continual learning and improvement in patient safety across the North West Coast.

Dr Julia Reynolds
Programme Manager

Dr Julia Reynolds is the Programme Manager at the AHSN, leading the Atrial Fibrillation/Stroke and Neurological Health programme.

Gill Hamblin
Programme Manager / Lead Nurse

Gill Hamblin is a Programme Manager and Lead Nurse with the AHSN. Gill has clinical responsibility for Mental Health and Cancer and is the AHSN Lead for Personalised Medicine.

Tricia Roberts
Programme Manager

Tricia joined the NWC AHSN in May 2014 after working as Business Development Manager at Alder Hey Children's NHS Foundation Trust. Tricia is the AHSN lead for Medicine Optimisation.

Dr Bryan Griffiths
Commercial Programme Manager

Dr Bryan Griffiths is the Commercial Programme Manager at the AHSN. Bryan is leading on support for local SMEs with particular focus on Liverpool City Region and Lancashire with the business assist programme.

Catherine Pollard
Deputy Corporate Accountant and Finance Development Lead

After graduating with a BA (Hons) Accounting degree from the University of Central Lancashire, Catherine started her career in the NHS, whilst also studying with the Chartered Institute of Management Accountants.

Jeni Quirke
Communications Manager

Trained as a journalist, Jeni first worked across a number of magazines and newspapers, specialising in gay and lesbian publications. She then worked in Marketing and Communications for New East Manchester, one of the largest and most significant regeneration programmes.

Chris Kelly
Project Manager

Chris joined the AHSN as Academic Liaison Officer / Project Manager in September 2014. Prior to joining the Network, Chris was a Project Coordinator within the BioPharmaceutical CMC Solutions department at Covance Laboratories.

Jen Gilroy-Cheetham
Project Manager / Lead for HCS and AHPs

Jen has worked as a Healthcare Scientist within the NHS for over 13 years. Trained as a Clinical Physiologist (Neurophysiology) within the UK's only dedicated Neuroscience Trust, where she obtained clinical competencies, registration and successfully qualified with a BSc (Hons).

Mike Tyldesley
Project Manager

Mike trained as a research Scientist with a B.Sc. in Pharmacology and a Masters of Research (M.Res.) in Biological Science, specialising in molecular genetics.

The NWC AHSN team

Dr Céu Mateus **Health Economist**

Céu Mateus is a health economist with a degree in economics, an MSc in European Social Policy Analysis and a PhD in Public Health and Health Economics.

Mark Scott **Communications Officer**

With over 25 years experience as a marketing and communications professional, Mark is a extremely energetic and motivated member of the communications team with extensive marketing, PR and sales campaign experience.

Pamela Briers **Executive Assistant**

Pamela joined the AHSN in March 2014 as Executive Assistant supporting the team. Previous to this her experience spans working within private sector industry to include manufacturing and retailing.

Gill Collen **Administration Assistant**

Originally joining the NHS in 1975, Gill has primarily worked locally and is an experienced medical secretary and office supervisor, in addition to gaining experience of working in HR medical staffing.

Appendix 2 – Overview of AQuA Delivery 2014 / 15

In 2013/14 the two North West AHSNs made the decision not to charge NHS Trusts a membership fee, due to the amount they already pay to quality improvement organisations. Both AHSNs made the decision to work closely with the North West improvement body, AQuA to realise joint benefits from their work. This arrangement will continue into 2015/16. Trusts who choose not to pay into AQuA pay a reduced membership fee directly to the AHSN.

Investment

A total of £603k has been invested in AQuA by North West Coast AHSN members. A further £135,424 has been directly invested by the AHSN, into AQuA for delivery of work within the Patient Safety Collaborative.

AQuA supports the AHSN to demonstrate clinical service improvement, including the building of capability in improvement science at all levels, and collaborative programmes of action to deliver demonstrable improvement in safety, effectiveness and patient experience. This is achieved through a range of programme offers summarised below.

Improving Safety of Care and Reducing Mortality

AQuA supported AHSN delivery through, an extensive range of safety initiatives run across the year.

- **Coalitions** for the national Patient Safety **Networks** and Sign Up to Safety support.

Capability building and action learning sets for safety

From the frontline to board and senior leadership for safety and quality; and, topic specific e.g.- measurement, leadership/culture, system reliability, specific harm including:-

- Patient Safety Champions
- Advancing Team Training Programme for Safety (ATTP4S)
- Improvement Practitioners modules.
- Learning sets and master classes with expert speakers
- Patient safety in Mental Health, including Safety Thermometer for Mental Health
- Don't Just Screen Intervene – Long Term Conditions.
- Zero suicides programme
- Reducing Mortality Network Collaborative
- Quarterly mortality reports
- Patient Safety Thermometer support.
- In 2015/16 further benefits will be derived from AQuA's partnership with the Health Foundation for: the testing of Charles Vincent's 'Measuring Monitoring of Safety' framework; Community SAFE; and, reducing restraint in Mental Health settings: 'Restrain Yourself' (Closing the Gap).

Evidence of the Consistency and Reliability of Care

AQuA's Advancing Quality (AQ) programme works to improve the consistency and reliability of healthcare, AQ's work originally focused on key acute conditions affecting the Northwest population.

- Established conditions: Acute Myocardial Infarction (AMI); Coronary Artery Bypass Graft (CABG); Dementia; Heart Failure; Hip & Knee; Pneumonia; Psychosis; Stroke
- Newly launched conditions in 2014: Acute Kidney Injury (AKI); Alcohol-Related Liver Disease (ARLD); Chronic Obstructive Pulmonary Disease (COPD); Diabetes; Hip Fracture; Sepsis.
- Parity of Esteem in Mental Health
- Improving Outcomes Packs - updated in 2014/15: Asthma; COPD; Stroke.

Building Capability

AQuA supports our members to transform the quality of care through the development of the skills and capacity for improvement at every level from frontline to board, achieved through an extensive range of capability building programmes available across the year:-

- Level 1: Introduction to Improvement (I2I)
- Level 2: Advancing Team Training Programme (ATTP)
- Level 2: Improvement Practitioner (IP)
- Level 2: Lean Fundamentals

- Level 2: Train the Trainer
- Level 3: Advanced Improvement Practitioner (AIP)
- Board Development to improve quality and safety
- Improvement Science Fellowships.

Improving Patient Experience

A wide range of Patient Experience offers will be available to member organisations including:-

- **Networks** for improving involvement in quality improvement.
- **Capability building** through shared decision making / self-management support and exploration of patient led care and motivational interviewing;
- Further benefits will be derived from AQuA's **Partnerships** with Health Foundation for: Transitions of Care (Closing the Gap).

Integration and System Leadership for Service Transformation

AQuA's programmes support the acceleration, the implementation and deepened learning of integrated care and transformation provided through:-

- Leading System-Level Change in a Complex World
- International Exchange Programme
- Integrated Care Fellowships
- Master classes with expert speakers
- Frail older people programme.

If you would like to work with us and make a difference to the lives of millions of local people, please contact:



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