South West

Academic Health Science Network

Annual Review 2013/14

Improving Patient Outcomes through Innovation

Our mission is to improve health outcomes by enhancing the quality and sustainability of healthcare.

We will achieve this aim by identifying innovation and best practice and accelerating their adoption.

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Chairman's Statement

"We have already initiated multi-partner projects, with participants straddling the complexity of health, social and community care in a way that has not previously been seen in the region."

In our first year of operation, we have given ourselves, members and partners great reason to be confident about the AHSN's role in the development and delivery of a sustainable, person-centred regional health economy.

We are rising to meet the need identified in 'Innovation Health and Wealth': to accelerate adoption and diffusion in the NHS.

'Innovation Health and Wealth' set out the ambition that: 'All NHS Organisations will aspire to be affiliated to their local AHSN, where the AHSN will operate as a gateway for the NHS on innovation and working with the life sciences industry on the evaluation, commercialisation and rapid adoption of health technologies'. We are advancing at pace and scale towards the realisation of that ambition and the confirmation of our expectation that this will improve both health outcomes and wealth generation for the people of the South West.

At a recent SW AHSN-hosted event for industry: 'A Partnership Approach to Meeting Challenges in the Health System', senior NHS colleagues (including the Chief Executives and senior clinicians of many of the Trusts in our footprint) and industry colleagues developed a model for collaboration. Those colleagues all spoke of the need to address any traditional cultural barriers to collaboration, to make possible a sustainable NHS that is best placed to deliver optimum care.

Challenge-led collaboration is a guiding light for the team, who are all passionate about maximising delivery through leveraging the unique skills of our members and partners.

The Board is ideally situated to offer the guidance necessary in these early stages:

Our membership (the four Clinical Commissioning Groups (CCGs), two Universities and 12 Trusts in our footprint) is represented on the Board in its entirety – there is also an industry representative. The composition of the Board ensures the ongoing alignment of strategic priorities, the delivery of value to our membership and a focus on the long-term sustainability of the organisation.

The composition of the Board also brings challenges: Each Board member is an executive director in his/her own right but must come to the table as a non-executive. We have undertaken our first Board-effectiveness review and continue, like the staff, to strive to improve. We are positive about how we are working together and that the challenges implicit in our composition are far outweighed by the opportunities that it presents.

"We have already initiated multi-partner projects, with participants straddling the complexity of health, social and community care in a way that has not previously been seen in the region."

It is clear that the South West Academic Health Science Network (SW AHSN) has moved from start-up into delivery mode. The important precursor work conducted in the start-up mode will be instrumental to the success of the projects now in operation in delivery mode. That work has provided the requisite mechanisms for our success and ultimately our longevity.

Dr Andrew Vallence-Owen
MBA, FRCSed

Managing Director's Statement

"The success of our challenge-led, partnership approach to meeting challenges in the health system is already evident."

One year since our launch, we are pleased to have achieved a thriving AHSN.

We are putting to good use the assets of our demography: Our stable population, characterised by high proportions of the population being aged 80 years and over (in some areas, 20 years ahead of the national curve), makes the South West an obvious test bed for meeting the age-related health challenges that the rest of England will face in the future. We will meet those challenges with a focus on the cost/benefit analysis of integrated care strategies and the rolling out of those that are the most effective; we are the AHSN that is establishing system-wide leadership in integrated care.

We have recruited a passionate team of core staff and are advancing at pace in the identification and prioritisation of the health challenges in the region and the co-creation of a programme of work that seeks to meet these challenges in a meaningful and impactful way.

Conducting innovation and best practice 'stocktake' meetings across our membership has enabled us to lay the appropriate foundations for this journey. We are confident that our strategic priorities are aligned with those of our members and are progressing with the development of the Collaboration for Innovation and Best Practice (CIBP).

This journey has also been supported by the use of funding for the development of an infrastructure to catalyse partnership working. Also invaluable has been the cultural and financial buy-in from our partners; the ratio of programme-related investment from partner organisations, to that of our AHSN, is greater than 2:1 overall.

"The success of our challenge-led, partnership approach to meeting challenges in the health system is already evident:"

- The ties that we have forged with industry are already enabling the improvement of outcomes for rheumatoid arthritis patients and the delivery of value to the NHS.
- We have worked with the seven acute providers in our footprint, to evaluate over 200 consecutive emergency admissions of patients aged 75 years and over, providing us with the qualitative and quantitative data necessary to identify the key questions that the we should be addressing in our mission to reduce unnecessary acute admissions.
- We are working proactively on a multi-partner project, to roll-out award-winning work by the National Institute for Health Research (NIHR) Collaboration for Leadership in Applied Health Research and Care South West Peninsula (PenCLAHRC) on the emergency stroke pathway at the Royal Devon and Exeter NHS Foundation Trust (RD&E), which will give the best chance of recovery with minimal disability to over 600 patients annually - exceeding the national target, set by the Department of Health (DH), by over 50%.

The most likely obstacles to meeting health challenges in the region – a diverse health community, with areas of marked deprivation across a rural setting – will also be the most likely enablers of our success. These obstacles have driven the prioritisation of the development of digital technologies and a solid partnership platform – both of which will be vital elements in the consolidation of our eminent position in the integrated care landscape during the year ahead.

Renny Leach.

Dr Renny Leach

Introduction

We bring together all South West NHS providers and commissioning organisations, two Universities, PenCLAHRC and many other partners.

History

The SW AHSN was established with financial support from 18 organisations across the South West Peninsula in mid-2012.

The Company Limited by Guarantee (CLG) was incorporated on 18 April 2013 with the NHS Trusts, NHS Foundation Trusts, CCGs and Universities as the voting members, with those member organisations legally able to do so signing up as guarantors.

A Board of Directors was elected in April 2013, to oversee the Network's strategy, governance and performance. Board meetings are held monthly.

We bring together all South West NHS providers and commissioning organisations, two Universities, PenCLAHRC and many other partners.

The business plans of our partners (including PenCLAHRC, the local NIHR Clinical Research Network (CRN) and Health Education South West (HESW)) are published separately and demonstrate our collaborative approach to improving Health Wealth and Innovation for the South West.

Extent of Geographic Reach

Our footprint covers Somerset, Devon, Cornwall and the Isles of Scilly, with a population of circa 2.2 million.

The geography of the South West Peninsula is both rural and expansive. The travel distance between Land's End and Axbridge is over 175 miles.

Population density is consistently low, despite pockets of urban conglomeration.

The population of the South West Peninsula has several defining features:

- **It is ageing more quickly than the rest of the country.** For example, the population of East Devon has an age structure that most parts of the country will not experience for another 20 years, with high proportions of the population aged 80 years and over.
- **There is a mixture of urban and rural areas, with poor access to services in some remote rural areas.** For example, Cornwall is one of the few counties in England with no motorway.
- **Despite pockets of affluence, there are areas of marked deprivation.** The South West Peninsula has urban and rural deprived communities, with up to 18 years difference in life expectancy for men between its most affluent and most deprived areas. There are high levels of rural deprivation, exacerbated by problems of isolation and poor access to services. This is recognised through Cornwall's EU 'Convergence' status and associated EU funding.
- **The population is relatively stable.** This provides the potential for a model research database for long-term conditions.

Strategic Priorities

The region has an eminent position in the national integrated care landscape and we are the AHSN leading this cross-programme theme nationally.

The overall strategic objectives are to:

- Identify and spread innovation and best practice at pace and scale.
- Increase innovation, industry engagement and economic development.

The region has an eminent position in the national integrated care landscape, with two Pioneer-status regions (Cornwall and also Torbay and South Devon) and two further areas in advanced stages of integrated care delivery (Symphony in Somerset and Enhanced Community Services in Devon). We are the AHSN leading this cross-programme theme nationally.

The focus on integrated care is critical to improving the health outcomes described in our original prospectus, which articulated the following health priorities: frail elderly; dementia; urgent and acute care (including stroke prevention); long-term conditions (including diabetes, cardiovascular, rheumatology and cancer); and, mental health.

The key enabling strategies, for us to succeed in our strategic objectives, include:

- Establishing the Collaboration for Innovation and Best Practice (CIBP) as the primary repository of knowledge and expertise in the South West.
- Developing education and training to ensure adoption and sustainability of best practice and development of research capability.
- Developing a comprehensive underpinning information management and technology (IM&T) strategy.
- Developing a 'challenge-led', partnership approach to economic development and regional prosperity.

Building Foundations

A key priority of the first year's foundation-building process has been a thorough 'stocktaking' exercise, to understand the challenges facing our members in much more detail. This valuable exercise has informed the strategic planning for the next few years and made it much clearer as to where we can add value and also support CCGs in commissioning for quality.

Outcomes from the 'stocktake' include:

- A comprehensive view of the local and national challenges facing South West organisations.
- An understanding of the current limitations of data and information analysis and the resultant needs.
- A picture of the vast array of initiatives being undertaken in the South West.
- A register of skills, knowledge and expertise from across the region.
- An indication of the means by which the wide range of organisations can work together and share knowledge and expertise.

The Collaboration for Innovation and Best Practice (CIBP), developing at pace, will provide:

- The 'go-to' (virtual) place for impartial information, data, expertise, regional knowledge, benchmarking and advice.
- A linked group of individuals and organisations, including clinical and functional networks, to develop partnership working.
- Region-wide monitoring of outcome improvement and value for money.
- Access to and development of outcome/cost analysis methods to evaluate and standardise methodologies to support commissioning intentions.

Innovation and Best Practice

The ‘stocktake’ has also been a catalyst for developing the wealth creation strategy and to build a ‘challenge-led’ approach, aimed at encouraging industry to partner with us to address the regional and national health priorities.

A range of best practice programmes and projects have been initiated and there is a comprehensive programme of wealth creation activities underway. Projects fit into the overall integrated care strategic theme. Many of these projects have been developed and are being managed in conjunction with Strategic Clinical Networks (SCNs), PenCLAHRC and the local CRN - as well as CCGs and NHS provider organisations.

We have always followed the principle of securing matched or parallel funding from other organisations. We have succeeded in realising partner investment in our programmes in excess of 2:1, as illustrated below for the different categories of project. We are demonstrating our growing ability to leverage our own resources to initiate projects, which would not otherwise get started.

Project group	2013/14 Investment - £000s	
	ASHN	Partners
Best practice		
Integrated care/long-term conditions	780	1,450
Urgent and acute care	273	273
Research capability	75	
F1 Quality Academy	40	
NHS-led innovations with potential for commercialisation	285	1,041
Industry partnerships and innovations	10	419
Total	**1,479**	**3,193**

Wealth Creation

While the South West starts from a relatively small health and life sciences commercial sector, we plan to use the assets and the demographic profile of the region to make it the fastest growing in this respect.

The region is likely to benefit from significant EU funding and we have been influential in ensuring that the health and life sciences sectors feature as key potential wealth generators for both of the Local Enterprise Partnerships (LEPs) covering the region.

Priority has been given to supporting NHS organisations in relation to project and intellectual property (IP) management. In conjunction with the University of Exeter, we have developed an online intellectual property and project management system to manage NHS innovations at multiple sites.

With regard to wider economic development, we are now involved in programmes with many partners. For example, in Cornwall and the Isles of Scilly, we are facilitating the development of an e-health innovation programme with our regional partners.

Rapid progress has been made with obtaining a comprehensive picture of the regional landscape, which has produced:

- 60+ partner relationships.
- 100+ stakeholder relationships.

Other projects under consideration include:

- The development of a hub for integrated care research in Torbay.
- Supporting the SEEDbed social incubator, involving Plymouth University and other organisations.

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Developing Partnership Working

An interactive engagement process with new partners has been developed. The plan is to expand formal participation via 'Associate Membership' status for other organisations that wish to join.

Membership

Member organisations have supported us financially since the development of the concept and prospectus. An interactive engagement process with new partners has been developed. The plan is to expand formal participation via 'Associate Membership' status for other organisations that wish to join.

Integrated Care

Close working relationships have been developed with all CCGs, each of which has an active integrated care programme. Two areas have Pioneer status: Cornwall and also Torbay and South Devon.

Education

The Network has agreed a Memorandum of Understanding with HESW, which has been signed by both Boards, to integrate strategies and avoid duplication. As our implementation plans develop, the two organisations will work together to ensure that the future skills and training needs of a more innovative and responsive health service are met through a combination of University, professional and specialist development programmes. Our Board members sit on the HESW Board and we have arrangements for reciprocal seats on each other's executive teams.

Local Authority/Third Sector

We are collaborating with the six HealthWatch groups within our geography, to develop a single, standard approach to the collection, collation and analysis of qualitative patient opinion on the quality of care services. This will be used to identify best practice in patient and public involvement and to support a patient-led approach to integrated care.

The Penwith Pioneer project involves co-operation with Age UK, which is backing the project financially.

Primary Care

A GP has joined the team with the brief to develop strong communication and engagement links with primary care. Initial discussions have been held to introduce the AHSN to various GP groups and the Primary Care Research Network is represented at Board level. The plan is to use the integrated care partnership work to build links with all of the GPs and other primary care groups across the region.

Commercial

We are working with the Universities and are developing strong multi-organisation partnerships, such as that with International Business Machines Corporation (IBM) and British Telecom (BT), to develop integrated IM&T strategies.

In developing the innovation culture of the NHS, it is crucial to collaborate with our industry and commercial partners. We are working with the Association of British Pharmaceutical Industries (ABPI); the Association of British Healthcare Industries (ABHI); the Ethical Medicines Industry Group (EMIG); British In Vitro Diagnostics Associations (BIVDA); and, others.

We are linked into various industry forums, including the NHS Industry Council, to promote the benefits and opportunities of joint working with NHS organisations.

Other Organisations

We have developed strong working relationships with the Clinical Senate and the individual SCNs. We are also hosting the South West Respiratory Network. Together we are developing a shared regional approach to improvement activity, ensuring that the various stakeholder organisations work collaboratively and avoid duplication.

We are also working on projects with the individual SCNs, including: personal care budgets; reducing suicides; and, improving coronary obstructive pulmonary disorder (COPD) diagnosis and care management.

We regularly work with the other AHSNs, particularly with regard to commercial and patient safety improvement activity. We also collaborate through the various Network of Networks initiatives.

Performance Highlights

We have recruited a passionate team of core staff and are advancing at pace in the identification and prioritisation of the health challenges in the region and the co-creation of a programme of work that seeks to meet these challenges in a meaningful and impactful way.

Ensuring the Better Management of Rheumatoid Arthritis through Medicines Optimisation

The issue we aimed to address and why we selected it:

This project aims to improve patient experience and outcomes from medicines used in rheumatology, through ensuring a focus on all **four principles of medicines optimisation:**

- Improving national awareness.
- Enriching consultations.
- Encouraging patients to be more responsible for their care.
- Encouraging the provision of better information and support.

The aim is to ensure better management of rheumatoid conditions by helping patients - and the system - produce better outcomes from medicines. This will deliver maximum value for the patients, the NHS and the pharmaceutical industry.

Rheumatoid arthritis is the second most common form of arthritis in the UK and the most common inflammatory joint disorder. Rheumatoid conditions cause joint pain, swelling, stiffness and fatigue - as well as severe disability. Most people can have periods of months or years between flare-ups.

Appropriate treatment reduces pain and symptoms and slows down the progression of the disease. It is important that treatment is started early, to minimise damage to joints.

The investment in medicines to manage these conditions is inconsistent across the South West. Co-ordination and financial planning has been extremely difficult and there has been a lack of benchmarking information to support peer review of medicines use.

What we did and the outcomes and impact:

The key elements of the project are:

Phase 1: Understanding the patient journey:

- Peer-to-peer review of practice and patient engagement.
- Recruitment and hosting of an industry-funded project manager and pharmacist.

Phase 2: Report on findings.

Phase 3: Communication and engagement:

- Identified and agreed changes to the patient pathway and other work programmes will achieve more consistent practice care with better outcomes for patients and efficiencies in the use of these medicines.

Phase 4: Implementation and monitoring:

- The Clinical Effective Medicines Optimisation teams across Northern, Eastern and Western (NEW) Devon CCG will continually monitor the pathways and prescribing to maintain consistency and safety.

Outcomes and impact:

- Reduced variation in clinical management.
- Implementation of technologies that have been approved by the National Institute for Clinical Excellence (NICE), with greater concordance.
- A reduction in the numbers of patients attending secondary care.
- An improved ‘quality of life score’ for rheumatoid patients.
- An improved service offering for NHS patients.

Understanding the Reasons for Emergency Admissions for Elderly People

The issue we aimed to address and why we selected it:

In the South West, we have identified an annual increase of 2.7% overall in the numbers of unscheduled admissions of elderly patients (aged 75 years and over) into the acute hospital setting.

There is significant variation in this rate of growth between acute Trusts within the region, ranging from -4.8% to + 5.0%.

Several reasons for this growth have been postulated, including:

- Increasing numbers of elderly people in the population.
- Increasing incidence of long-term conditions such as diabetes.
- Changes to GP out-of-hours services.
- Inadequate provision of social care support.

The variation in growth would suggest variation in provision of services.

Better care of the frail elderly population is a priority from both a quality of care and financial perspective.

Furthermore, it is only possible to deliver and measure improvements in care if we have a detailed understanding of current provision, a baseline measurement of that position and, from a patient's perspective, the key social, physical and mental health factors that trigger urgent referral into the acute hospital setting

What we did and the outcomes and impact:

All seven acute providers completed a detailed evaluation of 30 consecutive emergency admissions of patients aged 75 years and over – resulting in a total of over 200 patients surveyed.

Both qualitative and quantitative data was recorded in the following domains: demographics and social situation; cause of admission; arrival, assessment and treatment; and, discharge planning.

Key findings included:

- Frailty did not appear to be a significant contributing factor, with only 25% of patients classified as moderately or severely frail.
- Contrary to general opinion, the vast majority of patients (86%) were admitted from their own homes - very few (3%) from residential or nursing homes.
- 71% of patients were on more than five prescribed medications.
- 45% of patients have infrequent social interactions (monthly or less frequent).

The results of this evaluation support the move away from disease-specific pathways of care, in favour of a more integrated approach to care. There is a clear requirement to incorporate physical, mental and social health care needs, from an individual patient's perspective.

As a result of this study, further analysis is planned to understand the relationship between social isolation and escalating care needs.

In addition, these findings have been used to frame the national Small Business Research Initiative (SBRI) Healthcare challenge on integrated care for 2014.

Working Collaboratively to Reduce Stroke-Related Disability

The issue we aimed to address and why we selected it:

We are working collaboratively to reduce stroke-related disability by accelerating the real-world implementation of clinical evidence for thrombolysis (clot-busting drugs) after acute ischaemic stroke.

Stroke patients are most likely to recover with minimal disability, if thrombolysis is achieved within 90 minutes from the onset of stroke.

Recovering with minimal disability means a better quality of life for the patient, reducing the burden on carers and the long-term costs to health and social services.

There are approximately 3,600 strokes annually in the South West. The 10-year target for stroke thrombolysis in the DH's 2007 National Stroke Strategy was 10% of all acute strokes.

There is huge variation in the South West, some centres with rates as low as 3-4% and with long door-to-needle times.

PenCLAHRC's award-winning precursor work, on the emergency stroke pathway at the RD&E, has already achieved a thrombolysis rate of 17% (2013) - matching delivery rates for large urban hyper-acute centres.

We are working collaboratively with PenCLAHRC, the South Western Ambulance NHS Foundation Trust, the South West Cardiovascular SCN and acute providers, building on existing work and expertise, to reduce variation and improve thrombolysis rates across the South West.

What we did and the outcomes and impact:

We will work with providers to roll out the treatment delivery pathway modelled by PenCLAHRC.

It is anticipated that 600 stroke patients will be treated annually, giving them the best chance to recover with minimal disability – exceeding the DH's national target by over 50%.

The implementation will be led by a Service Improvement Manager, working with PenCLAHRC's operational modelling team, local Trust physicians, managers and data analysts to ensure the delivery of effective plans for change.

The project objectives are to:

- Use simulation models to better understand in-hospital delays and further explore the positive impact of care re-organisation.

This involves creating a computer model to mimic the flow of patients through an emergency department and stroke unit, using data collected locally from the ambulance service, the hospital's emergency department and patient administration IT systems. The models will also be used to analyse the geographic spread of acute stroke in the region and to investigate the varying approaches to treatment at different centres, taking account of ambulance travel times. The specification of necessary IT to support this modelling also provides for future monitoring of the quality of service change using routine data.

- Identify barriers to and facilitators of change within a Trust, through the model development process.

South West

Academic Health Science Network

The SW AHSN listens to and works with organisations, sectors and individuals who want to enhance the quality of healthcare in our footprint and beyond.

info@swahsn.com

01392 247 903

www.swahsn.com