

# Collaborating to improve safety and quality of care

**Our plan 2017 – 2018**

Innovation Agency  
North West Coast

**Patient  
Safety  
Collaborative**

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# Introduction

It is four years since the Berwick Report made a pledge on behalf of the NHS of 'a promise to learn, a commitment to act' on patient safety. One of the outcomes of that report was the establishment by NHS Improvement of the Patient Safety Collaborative programme, the biggest patient safety initiative ever undertaken in this country.

In the North West Coast, we have collaborated with our health partners to identify regional priorities and work on key topics such as sepsis, early detection of deterioration and medicine optimisation. We have led the national Patient Safety Collaborative sepsis cluster and we are playing an active role in the new national workstreams.

Our work is integrated with other programmes delivered by the Innovation Agency, driving innovations which lead to improvements in care. We also work closely with colleagues in all 15 Academic Health Science Networks and regional patient safety collaboratives, as well as with NHS Improvement and with partners including AQuA, the Health Foundation and Sign up to Safety. Our collective aim is to build a culture of continuous learning and improvement.



This report describes our approach for the coming year and highlights some of our achievements and work to date.

Please get in touch if you would like to get involved.

**Dr Phil Jennings**  
*Medical Director*  
*Innovation Agency*

## National workstreams

We are working with colleagues in NHS Improvement and all 15 regional patient safety collaboratives on three areas of national significance and importance:

- **creating the conditions for a culture of safety** A positive safety culture has a direct impact on patient safety, as it helps prevent and reduce harm, and improve the quality of care. We will enable and support organisations to assess and improve their safety culture.
- **improved recognition of physical deterioration, including sepsis and AKI** The early identification of and response to patients who have become acutely unwell is essential to reduce subsequent catastrophic effects and to save lives. We will work together to build upon earlier work, to make collective improvements.
- **improving maternal and neonatal safety** We will support the national Maternal and Neonatal Health Safety Collaborative to reduce the rate of stillbirths, neonatal and maternal deaths, and brain injuries that can occur during or soon after birth.



"The years ahead are an exciting time for the Patient Safety Collaborative programme as we continue to build on our successes and increase our collective efforts. We will strive to ensure that the programme makes care safer for all."

*Phil Duncan, Head of Programmes – Patient Safety, NHS Improvement*

# Regional programmes

## North West Coast Patient Safety Expert Group

We have established a Patient Safety Expert Group who review progress and develop the strategic approach to patient safety for our region. The group is representative of trusts, CCGs, charities and patient groups and steers our direction of work.



"By working together in the Patient Safety Collaborative we have the opportunity to be early adopters of best practice and it supports our continual learning about improving the safety and quality of patient care."

*Professor Arpan Guha, Deputy Medical Director of the Royal Liverpool and Broadgreen University Hospitals NHS Trust*





## Spreading innovations

Our Patient Safety Collaborative team works closely with colleagues at the Innovation Agency, particularly in spreading innovations which support patient safety.

We support national initiatives to spread innovations, such as the products funded through the Innovation and Technology Tariff. There are six products available at zero cost through the tariff, all of which are proved to improve safety and quality of care. These are:

- Guided mediolateral episiotomy scissors to minimise the risk of obstetric anal sphincter injury
- Arterial connecting systems to reduce bacterial contamination and the accidental administration of medication
- Pneumonia prevention systems designed to stop ventilator-associated pneumonia
- Web based applications for the self-management of chronic obstructive pulmonary disease
- Frozen microbiota transplantation for recurrent *Clostridium difficile* infection rates (available late 2017)
- ECG devices which patients can use to identify and measure atrial fibrillation through mobile ECG technology, preventing stroke



We are also promoting the use of **Venner WireSafe**, which prevents accidental guidewire retention in surgery. This was developed by NHS Innovation Fellow Dr Maryanne Mariyaselvam, who is also driving the adoption of the NIC, the Non Arterial Injectable Connector which is covered by the Innovation and Technology Tariff.



## Medicines optimisation

The inefficient use of medications is a major problem for patients and for the NHS. Between five and eight per cent (this figure rises to 17 per cent in the over 65s) of all unplanned hospital admissions are due to medication issues often caused by failure to take the right medication.

Our work to improve the use of medicines includes the following projects:

**We are rolling out electronic transfer of care to pharmacy (eTCP)** systems in up to 12 trusts in the Cheshire and Merseyside region. This will create fully automated transfers of admission and discharge information to encourage collaboration between secondary and primary care so that unnecessary variation and duplication of services can be avoided.

It is expected that this will deliver more than £3m of savings and save around 5,000 bed days from reduced patient readmissions per year - in addition to better clinical outcomes for all patients.

We are working in partnership with the Merseyside Pharmacy Local Professional Network to implement and then evaluate the eTCP systems in Cheshire and Merseyside.

**We have partnered with NHS Business Services Authority and will be testing the capability of the new ePACT2 database**, which will aid prescribers in audit and quality improvement activity.

**We will evaluate the impact of introducing pharmacists into GP practices** through the 'Closing the gap' programme to improve medicine prescribing safety.

**We are carrying out a trial of FebriDx in primary care settings.** This is a novel point of care test which will allow front line clinicians to distinguish between viral or bacterial upper respiratory tract infections, supporting antibiotic stewardship and identifying sepsis.



"Patients are always surprised to learn that systems aren't joined up between a GP and hospital and community pharmacy. We must say to hospitals that when patients are admitted they are their guests and when they leave, they should give us all of the information about them so we can act on it, continue their care in the community and carry on looking after them. Using electronic transfer of care to pharmacy (eTCP) systems will significantly improve the flow of information and medicine optimisation – while reducing readmissions."

*Hassan Argomandkhah  
FRPharmS IPresc Chair  
of Pharmacy Local  
Professional Network*

## Atrial fibrillation (AF)

Preventing strokes has been a priority area for the Innovation Agency since we were established in 2013. This work has already had an impact, identifying people with atrial fibrillation (AF) and avoiding life threatening strokes. (see Highlights page 12)

Our AF work will continue with a range of initiatives, including the involvement of citizens, as described below.

We are deploying **portable ECG monitors** in GP practices, supporting them with training and local awareness raising, to screen around 900 people each month. This will typically identify around 23 patients with AF, preventing one stroke per month.

We are recruiting a cohort of **AF Ambassadors** who will use AliveCor Kardia devices with relatives, friends and their wider networks to increase identification and awareness of AF. This is in partnership with the Stroke Association and follows their model of Stroke Ambassadors.

Our pilot programme of **genotype guided dosing of warfarin** in partnership with the Wolfson Centre for Personalised Medicine at the University of Liverpool and the NIHR CLAHRC for the North West Coast is being evaluated, with a report expected in autumn 2017. Following this evaluation, we will support the spread of this innovative practice to more anti-coagulation clinics in the region.

We are a partner with Liverpool Heart and Chest Hospital in a programme of remote **monitoring of bradycardia**, a slow heartbeat, having secured £1m from Ritmacore, a European public procurement of innovation initiative.

Cheshire Fire and Rescue Service have been provided with 25 MyDiagnosticks (portable ECG monitors) and so far have carried out more than 630 pulse checks and advised 20 people to see a GP, during their Safe and Well visits to vulnerable residents.



"A quarter of the people who have a stroke are under 65 and I was just 33 when I had mine, eleven years ago. It was tough but I would like to reassure survivors that there is life after stroke. I can't wait to try out the AliveCor Kardia on my family and friends; the more we can do to raise awareness of AF the better."

*Stroke survivor Kim Hughes from Liverpool, an Innovation Agency AF Ambassador*





*Parents Rachel Barrett and Nathan Flanagan using the children's health app, CATCH*

## Transformation through innovation

A number of projects to support the transformation of health services have received funds from the Innovation Agency's Transformation Through Innovation initiative. These have an impact on patient safety and quality of care and are being supported by our team. They include the following:

Expansion of the successful Babybox programme in Halton, incorporating the Baby Box University and Elemental Software's social prescribing platform. This aims to provide women with a connection to all levels of guidance and peer support to enable a healthy birth and after care.

It is a pilot involving a cohort of women and families, tracking their development and emotional health by keeping a live connection with relevant programmes and services in their community through support via a virtual 'mum'. The intention is to roll out the programme across Cheshire and Merseyside.

Catherine McClennan, Programme Director of NHS Cheshire and Merseyside Women's and Children's Partnership said: "Each of the 1,600 babies born in Halton every year will receive a free Baby Box which comes with a foam mattress, waterproof cover and cotton sheet which may offer an alternative to a Moses basket or cot. This scheme has helped Finland achieve the world's lowest infant mortality rate.

"The Baby Box is part of a wider improvement programme to ensure mothers and babies have access to maternity care, advice and support as early as possible in pregnancy and through to the early years for their children. The Innovation Agency funding is being used to enhance the Baby Box University – a maternal and childcare education platform – by linking local organisations and support groups to become part of a Baby Box community and improve social isolation and emotional and physical wellbeing".

**“Studies show that using Teletriage helps patients remain within their home, thus improving their patient experience, and reduces exposure to hospital acquired infection and hospital based falls which are more prevalent among this group.”**  
**Boo Stone, Wirral Council Adult Social Services**

**Video consultations** at home for outpatient appointments at St Helens and Knowsley Teaching Hospitals NHS Trust – reducing pressure on Outpatients and improving convenience for patients. The initial phase of the project, in areas of the Burns and Plastics Department and Stroke Clinic, will benefit almost 1,000 patients across the North West of England and North Wales.

Use of **3D printed anatomical models** to support surgery preparation at the Royal Liverpool and Broadgreen University Hospitals and Liverpool Heart and Chest Hospital, after supporting its use at Alder Hey Children’s Hospital.

Expansion of a **teletriage** programme in Wirral care homes: Wirral Council, Wirral CCG, Wirral Community NHS Foundation Trust and Wirral University Teaching Hospital are using the Innovation Agency funding as an extension to their Teletriage programme in 30 care homes. Through linking with patients via video to identify early problems, the Teletriage project aims to reduce ambulance journeys, A&E attendances and hospital admissions of patients at these homes by 10 per cent during a year.

Spread of the **CATCH** (Common Approach To Children’s Health) app from Cheshire to improve children’s health in Halton and reduce pressure on services – developed by Liverpool SME Damibu.

A project to prevent falls in Lancashire residential homes: **‘Steady On!’** has been developed by the falls prevention team at East Lancashire Hospitals NHS Trust and the University of Central Lancashire and is now being adopted countywide, to address the predicted 40 per cent increase in falls by older people in the next 20 years.

The project is used alongside body-worn sensors and a mobile app to assess mobility, falls risks and frailty and includes community support, education, physiotherapy and podiatry.

A Lancashire and South Cumbria **health coaching** initiative to give patients more control of their own health and care, with a cascade of training to spread the approach as widely as possible.

Use of a gaming app to encourage children to better manage their asthma: Liverpool CCG is working with local company Milky Tea to develop an app that, through play and fun, creates better understanding about asthma and the importance of using inhalers.

## Culture and capability

Improving care involves continual learning and a culture which supports openness, collaboration, curiosity – and change. We support a number of networks to promote continual learning and to help build capability within organisations; these networks are described below.

Our **Q** community has been developed in partnership with the Health Foundation to improve health and care quality and connect people with improvement expertise across the UK. Around 104 people in the North West Coast with a passion for improvement have been recruited as Qs.

Through our **AF Collaborative**, we are sharing best practice and providing training and peer support for staff in GP practices with an interest in managing patients at risk of stroke.

A network of **Evidence Champions** has been created following the first year of our Postgraduate Certificate Evidence Champions Programme, delivered alongside our commissioned partner, Lancaster University. This cohort of primary care clinicians and commissioners have carried out work based projects related to using evidence in the commissioning cycle.

This network will grow as the programme continues.

The Innovation Agency's **Innovation Scouts** are senior clinicians and staff in the NHS and also in universities, local authorities and other public services. They are champions of innovation in their organisations and help to spread best practice, including patient safety improvements.

## Innovation toolkit

We have developed a **Putting Innovation into Practice** programme, a self-guided online toolkit to develop capability for innovation adoption. This is available for organisations to use in implementing improvements in patient safety.



"I am about to start a new project which will require the input of young vulnerable people; I co-ordinated a listening session at the North West Coast Q launch where colleagues shared their experiences of engaging young people in improvement work. I was amazed at the creativity that people shared and I came away with several useful contact details. This will accelerate my project and help me avoid pitfalls that others have experienced."

*Q member Sue Hooton, Professor of Nursing and Quality Improvement, University of Chester*

# Highlights of achievements

Our Patient Safety Collaborative work, carried out in partnership with colleagues in health care, universities, patient groups and businesses, has led to real impacts on the health and wellbeing of patients and residents in our region.

As well as our regional projects, we have worked with colleagues around the country in other patient safety collaboratives and in NHS Improvement and NHS England, to learn from each other and spread best practice. This has included our role leading a national sepsis cluster.

This is a snapshot of our achievements so far.



## Preventing strokes

**256 potential strokes avoided** through atrial fibrillation detection, **saving around £5.6m** in NHS resources

**Genotype guided dosing** has brought personalised medicine to more than 100 citizens, establishing the correct dose of warfarin for patients with atrial fibrillation through genetic testing therefore reducing multiple clinic visits

Secured £612,000 for Liverpool City Council to invest in **domiciliary care technology** to keep people out of hospital - Sustainable Technology for Older People – Get Organised (STOPandGO)

“The old way of prescribing warfarin is more hit and miss; this (genotype guided dosing) is bespoke medication, calculated on my gene type. My mum went on warfarin eight months ago and she was back and forward to the clinic at least four times on a weekly basis before they got the dose right. I went back once, which meant I could go back to work quicker, feeling well enough to go back to normal life. I think this a win-win, for me and for the health service.”

*Warfarin patient Paul Downie*





## Care homes

Funded the delivery of the falls prevention programme '**Steady On!**' in Lancashire care homes.

Spread the **Anticipatory Care Calendar** to about 30 care homes, enabling early recognition of dehydration and sepsis, avoiding hospital admission; supported by e-learning.

Two **care home guides** were produced by Healthwatch Lancashire following a programme of 'enter and view' visits funded by the Innovation Agency. One helps families choose a care home; the second highlights best practice, for care home providers.

Developed a **sepsis e-learning** tool aimed at care home staff to facilitate the early detection of sepsis, available on the Sepsis Trust website.

"STEADY On! is proving very successful with our residents. The team's enthusiastic, knowledgeable and friendly in providing guidance on how to stay safe in the home and outside. The approach is reassuring for those at risk and feedback has been immensely positive."

*Jane Kitchen, Urgent Care Commissioner, Greater Preston, Chorley and South Ribble CCG*

"I wholeheartedly support House of Memories because in helping to develop this app it showed myself and my peers that we can still learn and we can still teach, I know that our group is extremely proud to have helped develop this app knowing the great enjoyment it brings to all that use it."

*Tommy Dunne, chair of the Liverpool Service Users Reference Forum (SURF) a group made up of people living with dementia and family carers.*

## Safety innovations

Helped to spread **House of Memories** dementia training to more than 11,000 service users, carers and relatives nationwide

Organised a hackathon about **care of deteriorating patients** – and are now supporting several innovations including a product to improve hydration in acute care

Established the **Innovation Exchange**, a digital showcase of innovations which serves as a bank of approved and rated products ready for adoption.

Funded 5,000 licences via Knowsley CCG for **myCOPD, myDiabetes and myAsthma**



*Image by Robin Clewley, reproduced by permission of National Museums Liverpool*

## Capability and culture

Expanded our community of **Innovation Scouts** from 50 to 70, including from mental health, local authorities and universities

Commissioned AQUA to deliver **leadership and improvement programmes** for patient safety, training more than 110 senior clinicians and managers

Recruited 100 **Q's** in our region, in partnership with the Health Foundation

Developed a **Putting Innovation into Practice** programme, a self-guided online tool to develop capability for innovation adoption



"Undertaking the evidence based commissioning course has developed my knowledge and skills in the use of quality improvement methods, and has changed the way I now approach any project in our clinical commissioning group. It has made an invaluable contribution to the skills I use to improve services for our patients."

*Dr Gareth Willis, GP Director  
NHS Greater Preston CCG*

"As an Innovation Scout I can learn from other innovation champions in the NHS and from companies who are at the leading edge of technology. It helps my role as Clinical Director of Innovation, keeping in touch with developments which we can use to help provide the best care possible for our patients."

*Mr Iain Hennessey, consultant  
paediatric surgeon and Clinical  
Director of Innovation,  
Alder Hey Children's Hospital*



## Collaborations with universities and industry

Launched a Postgraduate Certificate **Evidence Champions** programme, alongside our commissioned partner, Lancaster University

Achieved a three-star **European Active and Healthy Ageing Reference Site** rating for our region

Published our work supporting NICE guidelines in relation to **reducing alcohol harms** in our region and understanding the barriers to uptake of Nalmefene

In collaboration with Amgen, tested a new **osteoporosis audit tool** with 40,000 patients in five GP practices, identifying nearly 8,000 who would benefit from targeted treatments

# Contact us

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