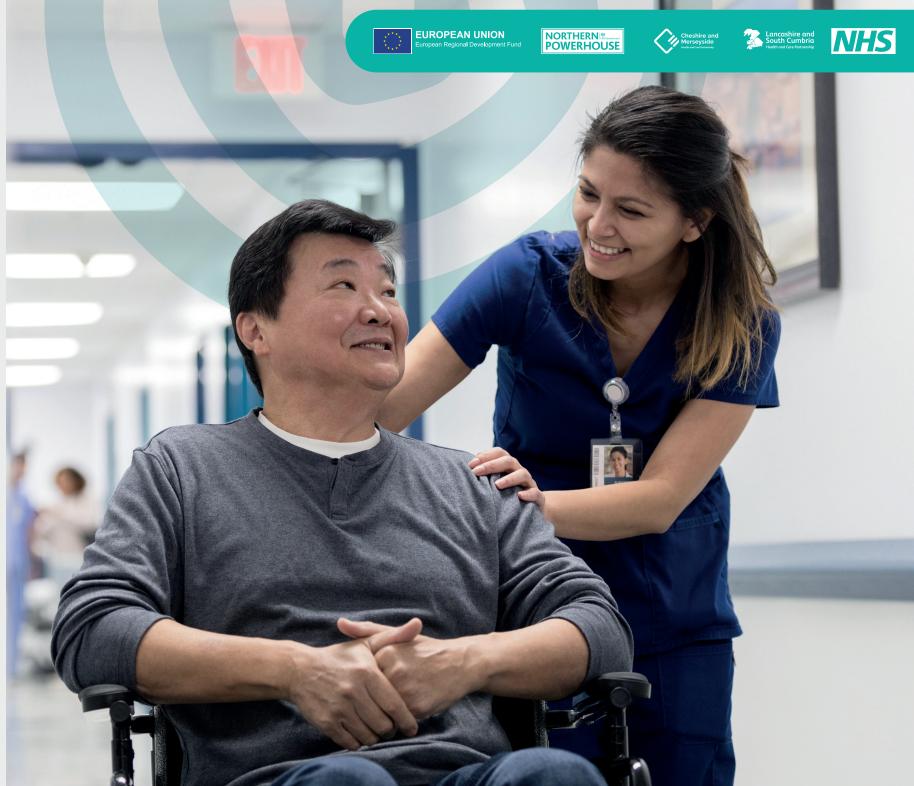
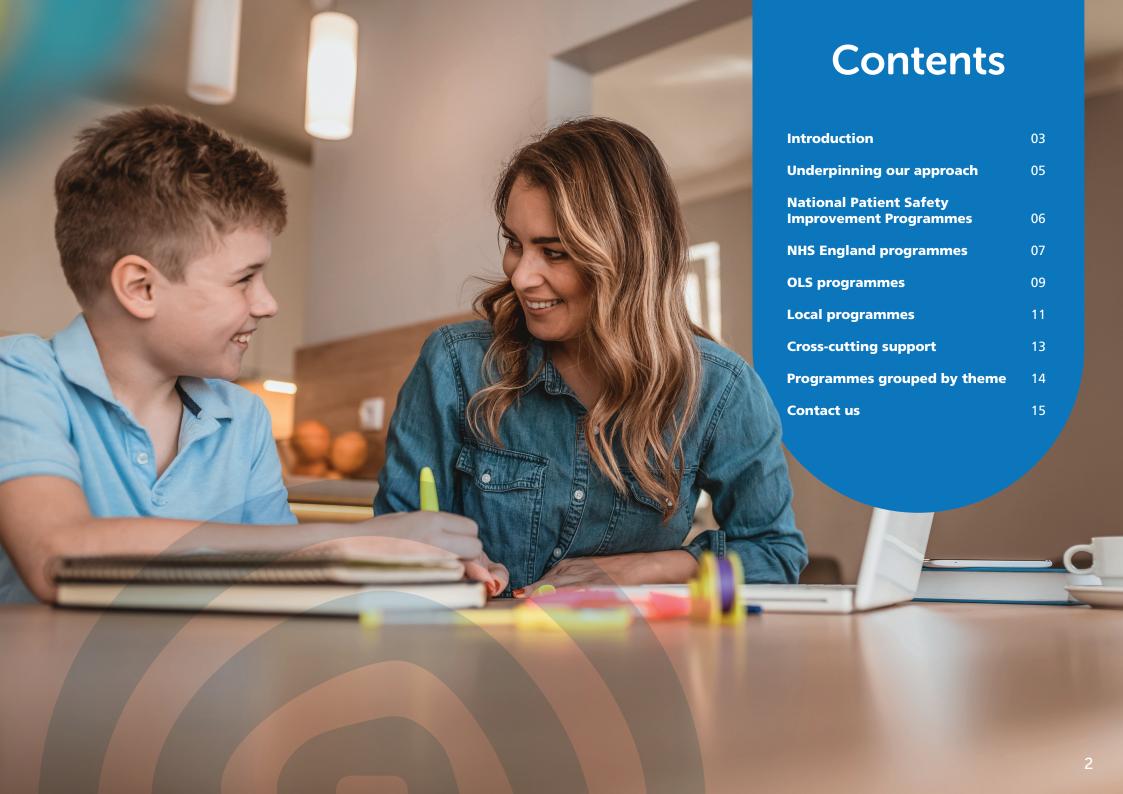


INNOVATION AGENCY Business Plan Summary







We help to deliver in the North West Coast focus on essential areas such as maternity and neonatal, CVD and respiratory, remote monitoring, mental health, management of deterioration and medicines safety.

For our partners in the ICSs we offer expertise and support in sourcing and adopting innovations; maintaining a live system map, digital insights, programme management; and facilitation of system and service change, supported by coaching.

We collaborate across the country through the AHSN Network and internationally to scan the innovation landscape and understand which solutions are the best fit for local needs.

This includes innovations which help our local partners meet the NHS net zero commitment, from companies in our region and across the world, sourced through our international programmes.

Our focus on economic growth involves supporting local businesses and clinical entrepreneurs and introducing pioneering innovations from around the world to bring best-in-class products to our region, presenting partners with opportunities for international collaborations.

As one of fifteen academic health science networks in the AHSN Network operating on five-year licences, we will be working with our national NHS commissioners in the coming year, to develop a plan for the five years from April 2023.

See programmes grouped by theme page 14.

THE INNOVATION AGENCY



Caring
Collaborative
Courageous
Innovative
Engage all voices



"Transforming lives through health and care innovation"



- + **Develop cultures** that promote equity and allow innovation to thrive
- + Stimulate economic growth and create jobs in the health and life sciences sector
- + Increase the spread and adoption of innovations through collaboration

UNDERPINNING OUR APPROACH

Supporting sustainability

Throughout our work we are carefully considering how best to help our partners progress towards the NHS net zero targets. This extends to the businesses and innovators we support, as we advise them on how to identify and present the sustainability benefits of their products.

We are active contributors to both ICS sustainability groups in our region and we plan to introduce a requirement for an environmental and sustainability impact assessment as part of our business case development.

Addressing health inequalities

We have adopted a consistent approach to identifying and supporting the reduction of health inequalities by using the Health Equity Assessment Tool (HEAT).

This tool has been applied to all clinical and care projects, using a process in which the project is peer reviewed internally; is subject to an external community panel; and an action plan is developed.

This has been applied retrospectively to existing projects and has been incorporated into our project management tool kit, becoming part of our business as usual.

Patient and public involvement (PPI)

Our patient and public involvement work supports patient safety programmes; collaborates with innovators, healthcare steering groups and small businesses; and provides input to locally and nationally commissioned projects.

This year, we are increasing our community outreach work to support CVD prevention across the North West Coast, targeting parts of the population who may not already be involved in health screening initiatives.

We recruit and deploy a growing number of 'Heart Heroes', volunteers who are trained to carry out health checks to spot individuals at risk. This year, as well as blood pressure and pulse tests we will be introducing cholesterol testing, to align with our CVD prevention programmes.

Meetings of patient senates are organised for our SMEs, co-producing, reviewing and co-ordinating focus groups to provide feedback on innovations.

A Patient Safety Senate works directly on the national patient safety programmes led by our Patient Safety and Care Improvement Team.

NATIONAL PATIENT SAFETY IMPROVEMENT PROGRAMMES

The fifteen Patient Safety Collaboratives (PSCs) led by AHSNs are the main delivery arm for five national patient safety improvement programmes.

We take a system-wide approach to:

- Bring together the whole system to impact on patient safety and other key priorities
- Develop a safety culture that works across the system and is led by staff and patients
- Use innovative approaches to deliver significant change and learning
- Focus on five national Patient Safety Improvement work streams and their alignment with system priorities.

The five PSC work streams are:

1 Managing Deterioration:

Reduce deterioration associated harm by improving the prevention, identification, escalation and response to physical deterioration, through better system co-ordination and as part of safe and reliable pathways of care. Our focus is on care homes, largely using the Restore2 model; and paediatric services, using the Paediatric Early Warning Score.

2 Maternity and Neonatal:

We are supporting each organisation, local maternity system and network in the North West Coast to be engaged in:

- Optimisation of the pre-term infant
- Culture work stream
- Early recognition and management of deterioration of women and babies

3 System Safety:

We will offer Patient Safety Improvement Networks at ICS level and support the roll out of PSIRF (Patient Safety Incident Response Framework) within systems. With regards to Patient Safety Improvement Networks, both ICSs plan to recruit a Patient Safety Specialist Lead and we will work with them to support engagement and share learning.

4 Medicines Safety:

The opioid safety improvement programme aims to reduce severe avoidable medication-related harm by 50 per cent by March 2024.

5 Mental health:

Reducing restrictive practice - we are aiming for a 25 per cent reduction in incidence of restrictive practice in all inpatient mental health and learning disabilities wards engaged in our programme by April 2023.

NHS ENGLAND PROGRAMMES

The Innovation Agency and fellow AHSNs are delivering programmes to spread evidence-based innovations in partnership with NHS England and the NHS Accelerated Access Collaborative, as follows below. Innovation Agency Chief Executive Dr Phil Jennings is the lead for the AHSN Network on the Rapid Uptake Products.

Early Intervention Eating Disorders

We are supporting mental health teams across the North West Coast to speed up the diagnosis and treatment of eating disorders in young people aged between 16 and 25.

Attention Deficit Hyperactivity Disorder (ADHD)

Mental health trusts and community paediatric services across the region are being supported to improve the ADHD assessment offer to children and young people, by implementing a computer based objective assessment tool, Qb Test, measuring attention, impulsivity and activity, to supplement current clinical assessment processes, aiming to increase the speed and accuracy of diagnosing ADHD.

Lipid management

There are three focus areas within our lipids programme:

Familial Hypercholesterolaemia (FH) detection and lipid management optimisation to reduce death and disability due to premature CVD. This includes expanded access to genetic testing for FH via screening of electronic records and piloting a process of child-parent screening to enable early diagnosis and treatment for those at genetic risk of sudden cardiac death as per NICE clinical guidelines (CG71) and Quality Standards (QS41).

We are improving patient access to appropriate medicines to enable lipid treatment using the NICE-recommended clinical pathway, with a focus on secondary prevention and including novel therapies.

In partnership with HEARTUK, we are optimising the Tackling Cholesterol Together education programme and the Cholesterol Now campaign.

Blood pressure optimisation programme

In partnership with NHS England's Transformation Directorate, formerly NHSx, the UCLP Proactive Care Frameworks are being implemented in primary care, with a particular focus on practices in areas with the highest levels of inequalities.

These frameworks include support for searching and stratifying patients, making best use of the wider practice teams, encouraging tech-enabled remote management, and promoting self-management and treatment optimisation in hypertension. This is also linked to the lipids work, with a key element being lipids optimisation.

We are using the Blood Pressure Quality Improvement Tool to facilitate the implementation of the frameworks and to help enhance ongoing quality improvement in monitoring and managing these patients.

This work is also supported by the Heart Heroes, a team of volunteers co-ordinated by the Innovation Agency's Patient and Public Involvement Team.

NHS ENGLAND PROGRAMMES

Polypharmacy

Health care professionals are being supported to identify patients at potential risk from polypharmacy (use of many medicines). This involves using data to identify patients for prioritisation; education and training for the primary care workforce; and public behaviour change.

Transforming wound care

Chronic lower limb wounds account for at least 42 per cent of all wounds in the UK, with leg ulcers being the most common type. In 2019, there were an estimated 739,000 leg ulcers in England with estimated associated healthcare costs of £3.1 billion per year.

The Transforming Wound Care national programme aims to ensure all patients with lower limb wounds receive evidence-based care which leads to faster healing of wounds; improved quality of life; reduced likelihood of wound recurrence; and more effective use of health and care resources.

Asthma management

We are continuing to help spread innovations prioritised by the AAC – the Rapid Uptake Products (RUPs).

There are two programmes aimed at improving diagnosis, treatment and ongoing management of asthma.

- a) Devices to measure fractional exhaled nitric oxide (FeNO) concentration in asthma:
- b) Asthma biologic therapy which can transform patient lives by reducing long-term side effects of other treatments, such as oral corticosteroids; and which can also reduce the number of exacerbations and life-threatening asthma attacks for people with severe asthma.

MedTech Funding Mandate

The MedTech Funding Mandate (MTFM) is a policy launched by NHS England to signal and support impactful technologies for widespread adoption and support.

We are supporting the adoption of seven products covered by this policy in 2022/23, which is addition to our four existing MTFM products adopted in 21/22; these and the Rapid Uptake Products are described on our website www.innovationagencynwc.nhs.uk/medtechfunding-mandate

National Innovation Insights Project

After a review of changes which took place during the pandemic, the AHSNs are working in partnership with their local NIHR Applied Research Collaboratives (ARCs) to provide a robust evidence base of the benefits of the changes.

In the North West Coast, the ARC is evaluating the application and effectiveness of two neonatal/maternity systems – Badgernet EPR and NEST@Home, for neonatal supported early discharge.

OLS PROGRAMMES

We are commissioned by the Office for Life Sciences (OLS) to work with the health and life sciences sector, supporting economic growth for the UK while improving patient outcomes and bringing value to the NHS. This work is in four parts:

1 Understanding the need and communicating demand

We provide a horizon-scanning and options appraisal offer to our NHS and social care partners.

2 Support and signposting for innovators

We support innovators from commercial, clinical, academic or other backgrounds to accelerate the development of their solution.

3 Gathering Real World Evidence

We broker partnerships between commissioners and providers to undertake 'real world' testing to create evidence to support spread and adoption.

4 Spread and adoption

The final core function commissioned by the OLS focuses on ensuring the spread and adoption of innovations into new settings and sites.

Nationally connected innovator support

We will present a consistent AHSN Network experience to innovators, both SMEs and clinical entrepreneurs, via the AHSN Network Innovator Offer. This is designed to provide the right level of support to innovators depending on their stage of development.

We will be integrating our regional support with a new NHS Innovation Service from the Accelerated Access Collaborative (AAC), so that the enterprises we support will also benefit from a national offer of support from a range of joined-up expert organisations. This service can be accessed at www.innovation.nhs.uk.

Sustainability and reducing carbon emissions has increased in importance as organisations strive to support the NHS Net Zero agenda. The Innovation Agency is supporting innovators with specific sustainability solutions; and with identifying carbon-reducing benefits of their products.

Innovation Pipeline

The Innovation Agency co-ordinates an Innovation Pipeline to facilitate the progression of healthcare innovations from an idea or prototype to national spread and adoption.

It provides a process to triage, develop and implement an innovation that is needed by our local system. It involves a series of decision-making meetings and collaborative activity such as first stage reviews, product demonstrations and submission to an innovation curation and assessment panel.

In 2022 – 2023 we will deliver system-commissioned horizon scans in respiratory, musculoskeletal, cancer, sensors, mental health, pathology and diagnostics, which will inform the development of business cases for procurement.

We will work with senior system leaders to bring innovations into practice by driving awareness of solutions that can help address the most urgent challenges, supporting business cases for investment and if commissioned their implementation, adoption and spread.

The North West Coast process feeds into a national dashboard which holds a searchable portfolio of more than 1,000 innovations submitted by all 15 AHSNs.

The system complements the Innovation Agency Exchange, a website that showcases innovations helpful to address North West Coast priorities, with more than 2,300 active members.

OLS PROGRAMMES

Health Matters

We offer dedicated support for local SMEs through our ERDF-funded Health Matters programmes, delivered in three areas, Cheshire and Warrington; Liverpool City Region; and Lancashire.

Our team excels in this area and during 2021 - 22 the Health Matters programmes helped to bring in £21.8m of investment; create 53 jobs in the region; and support a total of 487 companies, compared with 389 the previous year.

Introducing international innovators

Some of the most promising innovators from overseas are being introduced to the NHS and social care by the Innovation Agency's dedicated international team.

The team offers a bespoke package of support to start-ups and scale-ups from continental Europe, predominantly but not exclusively as part of EIT Health's Bridgehead programme and increasingly from further afield, including Canada, Israel and the USA.

An example is tech firm LuxAI from Luxembourg, whose small, human-like robots are boosting the life chances of children with learning difficulties, disabilities and autism in the North West.

Several of the QTrobots have been introduced into specialist schools run by the Together Trust charity in Greater Manchester as part of a project initiated by the Innovation Agency.

NHS Innovation Accelerator

The NHS Innovation Accelerator (NIA) is an award winning, NHS England and NHS Improvement initiative delivered in partnership with all 15 Academic Health Science Networks (AHSNs).

Successful applicants join a community of innovative individuals - 'Fellows' - with a passion for sharing their learning and expertise, including a number from the North West Coast who are also supported through the Innovation Agency's Health Matters programme.

Recent additions to the programme who are being supported by the Innovation Agency include Charlene Tang of Cyted and Louise Morpeth of Brain in Hand.

SBRI Healthcare

SBRI Healthcare is an NHS England initiative supported by the AHSN Network to promote UK economic growth while addressing unmet health needs.

This year, we are programme managing the implementation of a successful SBRI bid by Cytoprime to develop the product Cytosponge for low intensity detection of barrett's oesophagus in our region.

The Innovation Agency works closely with SBRI Healthcare lead agency LGC on developing competitions; and actively supports innovators, encouraging them to submit bids, providing advice and guidance and identifying collaborators from both industry and NHS.

Clinical Entrepreneur Programme

The NHS Clinical Entrepreneur Programme is an entrepreneurial workforce development programme for NHS staff and healthcare professionals, supported by the Innovation Agency and all AHSNs.

It is part of the Accelerated Access Collaborative (AAC) and aims to retain innovative staff in the NHS – and help them to develop their business ideas.

Any Clinical Entrepreneur within our region can also access the Innovation Agency's business support programmes, with fully funded market access support and real world evaluation.

An example is Dr Elliot Street of Inovus Medical in St Helens, who we helped to secure £1 million of SBRI Healthcare funding and whose company secured £7 million of investment in summer 2022.

LOCAL PROGRAMMES

The Innovation Agency is working with the new Integrated Care Boards (ICBs) to identify system needs and emerging opportunities to deliver collaborative local programmes which match their priorities and work streams. System level change programmes will be supported through the strategic spread of high quality, well evaluated innovative solutions. The systems will be supported to develop the capacity, capability and culture to implement innovations and adopt best practice from elsewhere. Key areas of work for 2022/23 are as follows.

Increase capacity and capability for innovation

We will continue to develop partnerships within the new ICB structures and programmes to offer a new model of innovation support at system level that helps to create the right culture for innovation adoption, continuous improvement, equity and inclusion.

Anticipated activities:

- Seek out opportunities for partnership working to support spread and adoption, articulated need for our local systems, and provide system intelligence to inform spread strategies
- Build capabilities and capacity for culture, innovation and improvement by developing our innovator communities, offering a combination of online and blended core programmes and bespoke commissioned offers that are designed to meet specific needs
- Innovation implementation support providing programme and project management, population health capabilities, service redesign and workforce modelling supported by coaching for improved outcomes
- Strengthening our strategic relationships with the Cancer Alliances where we will oversee the PinPoint test pathway implementation
- Endoscopy improvement deliver transformational change opportunities for

- endoscopy across the North West Coast, including delivery of Cytosponge technology in community and primary care settings
- Support prevention, population health and health inequalities/Core20plus5 approaches across both systems through tailored offers of support and insights into innovations

CVD prevention and improving management of respiratory and long term conditions

We continue to support the NHS national ambitions for cardiovascular disease (CVD) prevention and respiratory management by delivering local programmes in the North West Coast to reduce heart attacks and strokes, as well as improving outcomes for people with respiratory disease, long term conditions and poor mental health with a strong focus on health inequalities.

Our activities:

- Continuing our respiratory work including programmes of prevention as well as approaches to improve detection and treatment of asthma, chronic obstructive pulmonary disease (COPD) and other breathing conditions
- Pulmonary rehabilitation pathway redesign and digital insights across our two ICS areas – supporting the system to innovate and include

LOCAL PROGRAMMES

a digital option in the pathway for patients to reduce workload and improve access to services

- Delivery of a respiratory educational website resource for Cheshire and Merseyside – 'Breathing Point' to support patients with information about their respiratory condition
- Improving digital access for patients with pulmonary rehabilitation requirements through piloting a loan scheme of iPads in partnership with O2/Virgin
- Long Term Conditions @home taking a virtual first approach to the management of longterm conditions in primary care and optimising the practice workforce to identify and manage patients with different levels of risk. We continue to use UCLP frameworks across many of our long term conditions work in primary care
- Supporting the optimisation of identifying and treating people with atrial fibrillation

Digital transformation

We will build on the successful roll-out of Oximetry @Home with the subsequent Long Term Conditions @Home and virtual wards, introducing monitoring tech to people's homes and providing remote support, to improve care and reduce hospital admissions.

Digital transformation is continuing in regulated care and in adult social care; our Digital Team is part of this work and facilitating cross-sector collaborations.

Anticipated activities:

- Regional scaling: We are supporting the national programme to scale up remote monitoring
- Benefits realisation we are developing a model to capture the benefits of digital enablement of remote monitoring and Virtual Wards, enhanced with a co-production guide and dashboard
- Sensor review: review of all sensor technologies that will support Virtual Wards
- Digitising regulated and social care
- Cheshire and Merseyside Digital Inclusion Project (with O2/Virgin)
- CIPHA and Sapien for waiting list optimisation in Cheshire and Merseyside (pilot and real-world validation)

The aim is to increase the use of remote monitoring and adoption of digital technologies in these pathways, leading to improved patient experience and outcomes and reduction in variations.

Third phase of psychology trainee role

A new trainee associate practitioner psychology (TAPP) role created in the North West Coast through a pilot project led by the Innovation Agency is continuing, with a third cohort to start training in March 2023.

Health Education England has approved funding over the last three years totalling £4.8m million to develop and extend the programme; and is

planning to apply for national accreditation and a focus on deployment into primary care.

The first 50 trainees graduated at the University of Central Lancashire in summer 2022, with a second contingent of 90 trainees working in primary and secondary care settings across the North West in 2022 – 2023.

Antimicrobial resistance

This is a new local programme in an important health and policy area. The UK Government has committed to achieving the World Health Organisation goal of reducing antibiotic use by 30 per cent by 2030. We will bring together innovation bundles and proven improvement projects to develop an impactful change package co-designed with the system to support delivery of this goal.

Projects that will sit under this emerging work programme include the following work areas: Respiratory infections, urinary tract infections, blood culture processes, differential diagnosis and improving diagnostic certainty, reducing cross infection / alternative environmental reduction measures (air scrubbers project underway).

These will sit alongside the more traditional elements of antimicrobial stewardship, i.e. antimicrobial education and development of new antibiotics led by other AHSNs and NHS England.

CROSS-CUTTING SUPPORT

Innovation Agency Coaching Academy

Our Coaching Academy delivers a variety of learning experiences for individuals and teams aimed at building a healthy culture for innovation.

There are programmes for culture change and for spread and adoption of innovations; and coaching for system leadership and workforce development.

At a system level, the Coaching Academy programmes seek to shift mindsets, build capacity for transformation, and support implementation. The aim is to improve workforce resilience and well-being, build talent and find the potential in all people.

The team has a track record for delivery and the necessary capabilities to deliver high quality, accredited coach training and education courses. They are in high demand to support our systems and regularly receive commissions to work collaboratively, for instance on leadership development at an integrated care system level; on remodelling care pathways; and on developing innovation strategy.

Commissioned programmes to be delivered 2022 to 2023 include new pathway modelling, for pulmonary rehabilitation and for adult ADHD; improvement collaboratives, including a trailblazer Proactive@Home programme; and communities of practice such as Q members and Innovation Scouts.

Communications and events

Events and communication activities have been provided online since the pandemic began and the summer of 2022 was the first time we held in-person events for more than two years.

The North West Coast Research and Innovation Awards that we deliver jointly with the NWC ARC and NWC CRN was our last physical event in February 2020; and was also the first physical event since that time, in June 2022.

We introduced two new awards – sustainability; and addressing health inequalities, both sponsored by our ICSs. In the coming year we will be reviewing award categories so that we can align more closely with the ICSs.

Our events team is skilled in running webinars on Zoom and using online engagement platforms. As well as supporting all internal teams with programme collaborations, their services have been in demand from local and national partners, supporting innovation and improvement programmes. We expect online events to continue but we are also planning a limited number of inperson events, where networking and relationship building is an important feature of the work.

Channels for our communications include social media – Twitter, LinkedIn, Facebook and Instagram; plus Youtube and podcasts. Our expertise in videos and podcasts is recognised by key partners and we are enthusiastic contributors to the AHSN Network podcast and video channels.

		THEMES											
	Innovation Agency 2022/23 planned programmes	Mental health insights guide	CVD	Respiratory	Maternity and neonatal	Polypharmacy and medicine optimisation	Management of deterioration	System safety networks	Cancer	Digital	Workforce OD and culture	Other	
	Patient Safety Collaborative				Optimisation and stabilisation of pre-term infants	Opioid/opiate safety	Restore2	System safety networks					
		Reducing restrictive practice			Culture		Paediatric Early Warning Score (PEWS)	Support for implementation of Patient Safety Incident Response Framework (PSIRF)			Maternity culture		
					Deterioration of women and babies		NEWS2						
	NHS England programmes	FREED (Eating disorder intervention)	Improving lipids management and implementing the lipids pathway	Asthma care	Lancs and South Cumbria: Possible maternity project for InHIP	Polypharmacy and medicine optimisation	Wound care management						
			Blood pressure optimisation	Cheshire and Merseyside: Using AI to stratify risks due to living costs (InHIP)							Supporting national programmes with QI and culture training		
		QbTest (ADHD diagnostic test)	Support for familial Hypercholesterolaemia programme										
	Med Tech Funding Mandate		HeartFlow		Placental growth factor			SecurAcath for central lines	Urolift/TURP			Gammacore	
									PLASMA system/TURP			XprESS/sinus dilatation	
								Thopaz+/digital chest drain	Rezum/TURP			Spectra Optia/ sickle cell	
									Greenlight XPS/TURP				
	Product uptake support (including Rapid Uptake Products)		Inclisiran	FeNO (asthma assessment)									
			PCSK9i	Biologics for severe asthma									
			Bempedoic acid										
			High intensity statins										
			Ezetimide										
	National Innovation Insights Project				Early supported discharge models in neonatal care								
ſ	Local programmes	Adult ADHD service model	Improving identification and management of AF	Pulmonary rehab service model			Health Calendar development - supporting people with learning disabilities	System support in service design and improvement	Cytosponge SBRI project	Regional scaling for remote monitoring	System support for service design and improvement	Air scrubber technology - standards development and biovalidation	
		Supply route for psychological professions		Pulmonary rehab Insight guide			Flu test and treat - joint working with Roche		Innovation showcase events	Virtual wards benefits realisation	Coach training		
		Mental health insights guide		Respiratory educational website Breathing Point					Pinpoint SBRI project	Sensor review	Bespoke facilitation and support		
		MAST real world evaluation (reducing demand on acute beds)							Endoscopy improvement plan support	Digitising regulated and social care	Learning and development		
											Culture Camp quarterly learning events		
											Real world evaluation		
									Thrive real world evaluation (endoscopy)	Cheshire and Merseyside digital inclusion project	Workforce Insights guides		

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