

The AHSN Network

Impact Report 2022-23



Accelerated
Access
Collaborative



Office for
Life Sciences

| Foreword

Academic Health Science Networks (AHSNs) have transformed the way the NHS identifies, adopts and spreads promising innovations.

In our first decade we have improved health outcomes and supported economic growth, both individually and working together as the AHSN Network.

Since 2018 our national initiatives have benefited more than 2.3 million patients, and our support to innovators has helped contribute more than £1.8bn to UK PLC, created or safeguarded more than 6,600 jobs, and delivered a return on investment of almost £3 for every pound.

Commissioned by NHS England and the Government's Office for Life Sciences, AHSNs were created ten years ago to bring together health services and academic and industry partners to improve patient outcomes and generate economic benefits through healthcare innovation.

Over the last year, we strengthened our partnerships including with the NHS Accelerated Access Collaborative (AAC), the National Institute for Health and Care Excellence (NICE) and the National Institute for Health and Care Research (NIHR) Applied Research Collaborations (ARCs). More information on these can be found from page 6.



Integrated Care Boards (ICBs) are increasingly key partners in matching innovation to NHS priorities and population health needs. I welcome the NHS England review being led by Roland Sinker, Chief Executive of Cambridge University Hospitals and outgoing Chair of the Shelford Group, to engage national innovation partners, local systems and research charities to develop a clear blueprint for how the NHS can best support, and benefit from, a strong life sciences ecosystem.

National programmes and initiatives from previous years have continued, including our work to improve ADHD diagnosis for children; speed up access to care for young adults with eating disorders; and transform care pathways for those with asthma. We have added two new programmes to our portfolio: reducing medication-related harm caused by problematic polypharmacy and using evidence and insight from the National Wound Care Strategy Programme to speed wound healing.

Our 15 Patient Safety Collaboratives (PSCs) have continued to deliver the National Patient Safety Improvement Programmes.

As we enter our second decade, AHSNs will carry on helping the health service tackle its most pressing issues, including helping to deliver a net zero NHS by 2040, addressing health inequalities and improving patient safety.

Since 2018, our support to innovators has helped contribute more than **£1.8bn** to UK PLC and created or safeguarded more than **6,600** jobs.

As we begin our third five-year licence, now as Health Innovation Networks, I would like to thank all my colleagues from across the Network and partner organisations for their dedication and support. The challenges facing the NHS can only be solved by harnessing the potential that research and innovation offers to provide better individualised person-centred care and maximise the skills and talents of our workforce.

We will continue to champion and support scale-up of the best healthcare innovations to improve health, support the NHS and achieve economic growth.

Professor Gary Ford CBE, FMedSci
Chair of the AHSN Network and Chief Executive of Oxford AHSN

In this report

Partnering for success



We work together with partners from across the health and care system, industry and academia to maximise the impact we have for our stakeholders.

National programmes and initiatives



AHSNs are commissioned by NHS England to collectively deliver a number of programmes on a national scale.

Our national adoption and spread programmes have focused on major NHS priorities around mental health, cardiovascular disease (CVD), respiratory disease, polypharmacy, and wound care.

We work together with the Accelerated Access Collaborative (AAC) as part of the enabling infrastructure for the Department of Health and Social Care (DHSC) MedTech Strategy. This sets out how the health and social care system will reliably access safe, effective and innovative medical technologies.

Improving safety

AHSNs host 15 Patient Safety Collaboratives (PSCs) across England and are the vital delivery agents of the National Patient Safety Improvement Programmes. With a focus on quality improvement and culture, the PSCs enhance patient safety by supporting staff to learn and continue to improve.



Supporting innovators

Funded by the Government's Office for Life Sciences (OLS), the AHSNs work to support health and care innovators to realise the potential of their innovations.



Cross-cutting priorities

Several themes underpin our work programmes and priorities. These include equality, diversity and inclusion; patient and public involvement; environmental sustainability; digital solutions and artificial intelligence; health inequalities; workforce; and improving patient safety.

Partnering for success

We work together with a number of partners from across the health and care system, industry and academia to maximise the impact we have for our stakeholders.



The organisations we work with include, amongst others, the National Institute for Health and Care Excellence (NICE), NIHR Applied Research Collaboration (ARCs); NHS Confederation; The Health Foundation; Health Education England; the Association of the British Pharmaceutical Industry (ABPI); and the Association of British HealthTech Industries (ABHI).

This year we have continued to build upon and develop our strategic relationships with partners and to identify new ones. You can see some examples of how we have done this over the next pages.

Partnering for success

Working together with NICE

The AHSN Network and the National Institute for Health and Care Excellence (NICE) have collaborated as part of a formal agreement.

NICE and the AHSN Network share a purpose to increase and accelerate patient access to well-evidenced innovation. The benefits of the collaboration are being seen through more inclusive discussions, stronger relationships, partner activities and oversight on common projects.

Over the last year, collaborations have taken place to share learning across the AHSN Network's national programmes; make improvements to innovator support; and develop an innovator guide to real world evidence. As a result of staff being more connected across the organisations, additional joint working has taken place across new activities such as the Innovation for Healthcare Inequalities (InHIP), polypharmacy, and FeNO programmes.

Close collaboration between the two organisations supported development of the NICE Medtech Innovation Briefing on QbTest, a tool which contributes to the ADHD assessment process, published in March 2023.

Follow the QR code to access our guide for innovators developing Real World Evaluation.



Partnering for success

Solving the most significant issues in local health systems together with the NIHR ARCs



All 15 AHSNs link with their regional National Institute for Health and Care Research Applied Research Collaborations (NIHR ARCs) to address national priorities and accelerate research and evaluation to solve the largest local system challenges.

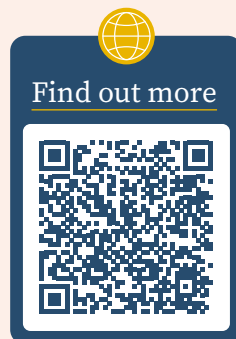
Both organisations share a strategic focus on diversity and inclusion; supporting the life sciences industry and public sector to improve health, wellbeing and economic prosperity; involving patients, service users, academics, healthcare professionals, carers, members of the public and communities; and enhancing cross-system collaboration.

This year the national AHSN Network has worked with the Accelerated Access Collaborative (AAC) and the ARCs on the NHS Insights Prioritisation Programme (NIPP), which aims to accelerate the evaluation and implementation of promising innovations which support post-pandemic ways of working; build service resilience, and deliver benefits to patients. These include four priority

areas: remote consultation, remote monitoring, new approaches to service delivery, and health and social care workforce innovation.

The programme started in November 2021, with each project delivering rapid insights by May 2023. An independent evaluation of the overall programme looking at the benefits of this particular type of collaboration will also be available in the coming months.

Find out more about our work with the Applied Research Collaboratives using this QR code.



Partnering for success

Celebrating excellence in health innovation alongside NHS Confederation



During 2022 we worked in partnership with NHS Confederation, the representative body for the NHS in England, Wales and Northern Ireland, to host the Innovate Awards – a new set of national awards focused on celebrating excellence in innovation and transformation across the health and care system.

These awards enabled us to build on our long-standing relationship with NHS Confederation, to jointly showcase the breadth of innovation happening throughout the UK across health and care. 2022 was the inaugural year for the awards, which saw more than 190 entries received across the 10 categories, and a sell-out awards ceremony in London in September 2022, which named the 14 winners and 12 highly commended entries.

The awards were supported by headline sponsors IQVIA; and category supporters Boehringer Ingelheim; NHS Employers; Big Health; Healthy.IO; the North of England Commissioning Support Unit; and Roche, as well as a superb set of experienced judges.

Following their success in 2022, we will be working with NHS Confederation again in 2023 to host the awards, which this year will see the addition of a new category – 'Best Use of Data in Health Innovation'.

Follow the QR code to find out about the winners and highly commended entries from the 2022 Innovate Awards.



Accelerated Access Collaborative



The AHSN Network continues to be a core partner in NHS England's Accelerated Access Collaborative (AAC), which brings partners together from industry, government, regulators, patients and the NHS to accelerate the introduction of innovative treatments and diagnostics to benefit patients and clinicians.

This year, AHSNs have continued to be a key delivery partner for the AAC, supporting programmes including the Innovations for Health Inequalities Programme (InHIP) (see page 40 for further information) and the MedTech Funding Mandate (see page 31 to find out more).



National programmes and initiatives

Alongside their focussed regional work responding to the needs of their local health and care systems, AHSNs collaborate on national initiatives that are expected to have a widespread impact. Outlined in this report is information about the collaborative programmes being spread nationally, or across a geography of multiple AHSNs.

In 2022-23 this included...

- Implementing an innovation to improve how attention deficit hyperactivity disorder (ADHD) is diagnosed in children and young people
- Enabling rapid access to treatment for young people with eating disorders through the FREED model (First Episode Rapid Early Intervention for Eating Disorders)
- Improving asthma pathways through access to Fractional exhaled Nitric Oxide (FeNO) testing and asthma biologics
- Supporting clinicians to get the balance right for prescribing in our Polypharmacy programme
- Transforming the care of lower limb wounds through our Transforming Wound Care programme
- Supporting the prevention and management of cardiovascular disease through our Lipid Management and Familial Hypercholesterolaemia (FH) and Blood Pressure Optimisation programmes

National impacts 2022-23



More than **530,000** patients have benefitted from our national programmes and initiatives



More than **179,000** hours of healthcare staff capacity released across local and national initiatives



1,512 innovations in our national pipeline of innovation



184 companies created long-term strategic partnerships



5,488 interactions with companies



2,831 companies supported



Almost **£428m** investment leveraged by companies supported by AHSNs



565 jobs created and **763** jobs safeguarded in companies supported by AHSNs

National programmes and initiatives

Helping children and young people receive a faster diagnostic assessment for ADHD

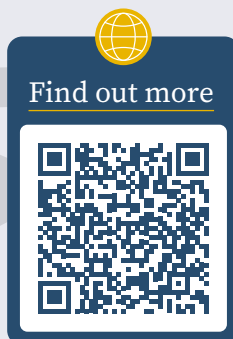
We supported NHS mental health trusts and community paediatric services in implementing an innovation to improve how attention deficit hyperactivity disorder (ADHD) is diagnosed in children and young people.

Pioneered in the East Midlands, QbTest is a 15-20 minute computer based objective test which measures attention, motor activity and impulsivity – the core symptoms of ADHD.

It is not a standalone test. ADHD practitioners use information from the QbTest report alongside their clinical assessment to inform their decision on whether the young person has ADHD or not.

The QbTest gives clinicians a better understanding of a patient's symptoms and potentially speeds up a diagnosis.

Find out more about our national ADHD programme via this QR code.

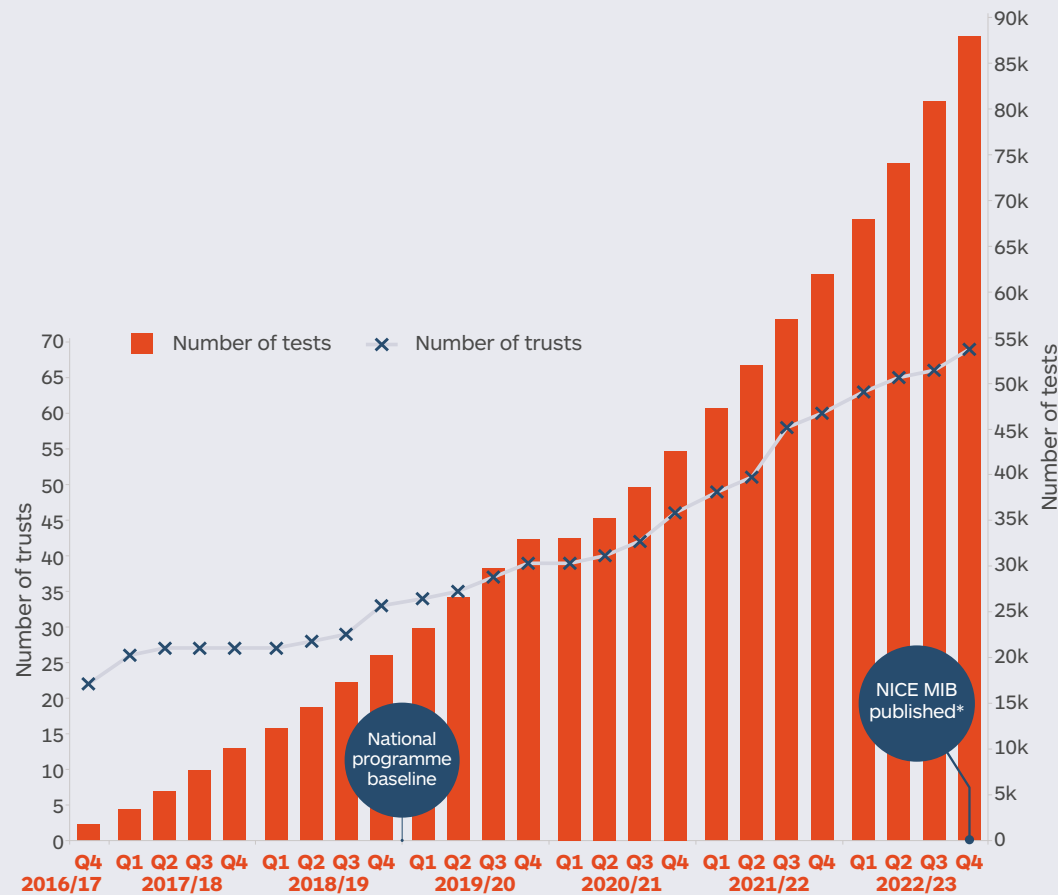


Focus ADHD - growth and impact

2017	2018	2020-22	2023
Randomised control trial	Real world evaluation	National programme	Sustained
<ul style="list-style-type: none"> • AQUA randomised controlled trial study in Nottingham • 36 sites providing QbTest assessment • 5,486 patients benefited from an assessment in year • 1-5 Qbtech staff (UK) 	<ul style="list-style-type: none"> • Demonstrator project evaluates QbTest in a real world environment across three East Midlands trusts • Won the 2018 HSJ award for Innovation in Mental Health • 43 sites providing QbTest assessment • 13,634 patients benefitted (assessed) since April 2016 • 1-5 Qbtech staff (UK) 	<ul style="list-style-type: none"> • Launched across England • National evaluation published in 2022* • Won 2022 HSJ Best Mental Health Partnership award and a National Mental Health and Wellbeing Award • QbTest is available in 13 countries • 138 sites providing QbTest assessment • 93,817 patients benefitted (assessed) since April 2016 • 20-30 Qbtech staff (UK) 	<ul style="list-style-type: none"> • Released approximately 20,500 hours of clinical time to see other patients and avoided an estimated 155,894kg CO2e (enough to drive 34 cars for a year) • Qbtech set to grow further with an additional 48 sites in 2023/24, taking the potential total to 186 sites • 45,000 patients predicted to benefit in 2023/24. Taking the potential total since 2016 to 140,000

“..the diagnosis ... was quicker, with fewer appointments”

Spread of an objective assessment using QbTest (Jan 2017 – March 2023)



*In March 2023 NICE published a Medtech Innovation Briefing relating to QbTest for the assessment of attention deficit hyperactivity disorder. www.nice.org.uk/advice/mib318

FOCUS impacts in numbers



69

trusts across 137 sites are now providing an objective assessment



22%

reduction in nurse school observations in Children and Adolescent Mental Health Services (CAMHS)*



19%

release of clinical time in Paediatric (and 9.2% in CAMHS)*



55,000+

patients benefiting since April 2020



92%

of clinicians said the results helped understand patients' symptoms**



Winner

3 national awards including 2 HSJ awards

**Findings from the national evaluation in October 2022

National programmes and initiatives

Rapid access to treatment for young people with eating disorders

We are supporting mental health teams across England to accelerate diagnosis and treatment of eating disorders for young people.

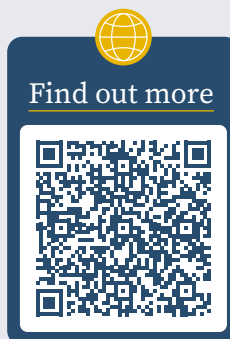
Eating disorders are serious mental illnesses and anorexia nervosa has the highest mortality rate of all mental health conditions. Peak onset for eating disorders is during adolescence and early adulthood, with referral rates rising during the COVID-19 pandemic. The 18-25 age group accounted for approximately half of the referrals.

We are using the FREED (First episode Rapid Early intervention for Eating Disorders) model to approach early intervention eating disorders. Developed by a team of researchers at South London and Maudsley NHS Foundation Trust (SLaM) and King's College London, FREED is a treatment model within an eating disorder service which provides rapid intervention. FREED reduces duration of untreated illness, improves clinical outcomes and ultimately helps to reduce the cost of treatment.

Individuals referred to a FREED service receive a telephone consultation within 48 hours of referral and begin treatment within four weeks, or two weeks in clinically serious cases.

Through the programme, which ran until the end of March 2023, AHSNs have supported their local system with business case development, recruitment, training with SLaM and enhancing shared learning opportunities.

Visit the link to the AHSN Network website at this QR code, to find out more about our national eating disorders programme.



"I nearly dropped out of university last year, when my anorexia was at its most aggressive. FREED's rapid intervention prevented this. I am slowly regaining the energy levels that anorexia drained from me. I can only thank FREED for quite literally saving my life."

A young person who has been supported by the FREED model.

2022-23 impacts

As a result of the AHSN network national programme 2020-23 there is an operational FREED service within the footprint of all **54** eligible mental health trusts in England

2,225 patients have started evidence-based treatment under FREED
71% of FREED patients are below the clinical cut-off on the Eating Disorder Examination Questionnaire (EDE-Q) global score after treatment

59% of FREED anorexia nervosa patients are weight recovered at ~1 year compared to 18% of anorexia patients receiving usual treatment in an earlier study

£9,950,200 savings to the NHS based on 2225 patients at £4,472 saving per patient

National programmes and initiatives

Transforming asthma care through improved access to diagnostics and innovative treatments

Asthma is a common condition in which the airways in the lungs become inflamed. The symptoms include breathlessness, coughing and wheezing. Some people with severe or uncontrolled asthma may be admitted to hospital in an emergency, with some asthma attacks life-threatening.

More than 5 million people in the UK have asthma (1 in 12 adults) and it remains responsible for 500 deaths per year. Asthma exacerbations lead to more than 65,000 hospital admissions, with an annual spend of £900 million on medicine costs. Overall, the NHS spends £1.2 billion on asthma annually.

We have delivered two programmes of work supporting transformation in asthma care - FeNO and Asthma Biologics, both of which were delivered in partnership with NHS England's AAC team, industry suppliers, nationally recognised clinicians, third sector organisations and patients.



Fractional exhaled Nitric Oxide (FeNO) testing

An estimated 30% of people with asthma are suspected to be misdiagnosed.

FeNO testing is a simple, non-invasive test to measure the amount of nitric oxide in an exhaled breath – a biomarker for airway inflammation. FeNO testing can improve patient care by contributing to a faster and more effective asthma diagnosis when used alongside a detailed clinical history and other tests. It can also be used to monitor patient response to asthma treatments.

Our programme ambition was to enable patient access to FeNO testing in primary care in line with the recommendations set out in NICE DG12, across England's 1,250 Primary Care Networks (PCNs).

The national programme team, led by Wessex AHSN, developed a suite of resources to support AHSN programme managers and the PCN stakeholders they were supporting, to transform their asthma pathways in a way that could support sustained implementation of FeNO testing.

Scan this QR code to find out more about our work on FeNO and asthma biologics.



2022-23 impacts

Our work has contributed to more than **1,000** additional FeNO machines entering PCNs across England to support improved asthma care for patients in the community. We estimate that more than **150,000** patients have benefitted from FeNO testing in primary care, with an estimated **58,000** being diagnosed directly as a result of FeNO testing, in the two years that we have been supporting the programme.

We have supported the spread and adoption of FeNO into an estimated **53%** of the PCNs in England, including many of the PCNs delivering healthcare for people in under served populations, and hope that the programme legacy and tools will continue to support others to follow suit.

Biologic therapies for patients with severe asthma

Severe asthma does not respond to regular asthma treatment and is distinct from 'difficult asthma'. An estimated 200,000 people in the UK have severe asthma and biologic treatments can be life-changing for these patients. From the total treatment population, it is estimated that around 60,000 patients are eligible for Asthma Biologics in England but fewer than 20% are currently accessing them.

The national programme team, led by Oxford AHSN, developed a suite of resources that were focused on optimising pathways in a way that could help with the early identification of people with uncontrolled asthma, appropriate referral of patients needing further specialist input and increasing access to asthma biologics.

These resources include:

- **SPECTRA case finding tool**
- **ePACT prednisolone dashboard**
- **myAsthma Biologics home monitoring tool**
- **AAC Consensus Pathway**

Scan this QR code to find out more about our work on FeNO and asthma biologics.



2022-23 Impacts

Our work has contributed to more than **3,000** new patient initiations onto asthma biologics prescriptions across England. We have also seen 3,000 fewer patients being prescribed 3g or more of prednisolone each month, showing how lives are changing as a result of this work.

All of England's **14** tertiary asthma centres have been supported by this programme, in an environment and service that was significantly impacted by the COVID-19 pandemic. We hope the legacy created from our pathway transformation work will continue to support the system to accelerate patient access further, so more of the remaining estimated **30,000** patients that could be eligible are prescribed a biologic.

National programmes and initiatives

Evidence-based care for lower limb wounds

In 2019, there were an estimated 739,000 leg ulcers in England with estimated healthcare costs of £3.1 billion per year. Early modelling indicates that in five years we can expect a 30% reduction in leg ulcer prevalence, release 11% of community nursing time, and reduce the spend on dressings.

Our Transforming Wound Care (TWC) programme sets out to address this challenge, using the evidence, learning and recommendations from the National Wound Care Strategy Programme (NWCSP) to ensure all patients with lower limb wounds receive evidence-based care. This leads to faster wound healing, reduced likelihood of recurrence, more efficient use of health and care resources and improved quality of life for patients.

So far, we are working with eight test and evaluation sites across seven

AHSN geographies to establish a dedicated lower limb wound service. These sites are located in London, Frimley, Cornwall, Norfolk, Sussex, Lincolnshire, and Yorkshire.

Follow this QR code to find out more about how we are helping to transform wound care.



2022-23 Impacts

Clinical feedback and metrics from the **six** test and evaluation sites engaged in 2022-23 have given positive indications. This insight reinforces the potential of the NWCSP recommendations to make positive and impactful changes to lower limb pathways in other geographic areas.

National programmes and initiatives

Polypharmacy: getting the balance right

We are working together with colleagues across the country to avoid severe medication-related harm caused by problematic polypharmacy by identifying patients at potential risk from harm and facilitating better conversations about medicines.

In England, NHS primary care dispenses more than one billion prescription items every year. As more people live longer with multiple long-term health conditions, the number of medicines they take often increases. Whilst we know that medicines can bring many benefits, we also see that this can create a significant burden for the person trying to manage multiple medicine regimes, and in some cases it can cause harm.

Problematic polypharmacy adds a cost to the healthcare system and diminishes quality care for the patient. Most of this is entirely preventable.

Our national Polypharmacy programme supports five of the recommendations from the NHS England National Overprescribing Review.

Hosted by regional AHSNs, we have created clinical, multi-stakeholder communities of practice across England, addressing problematic polypharmacy within their local areas.

Over the last year we have focused on three pillars with our polypharmacy work: population health management, education and training, and public behaviour change.

Looking ahead

In the second year of the programme, we will continue to build on the success in the first year by testing our public-facing behaviour change materials, training clinicians, and driving use of the NHS BSA Polypharmacy Prescribing Comparators.



Find out more



2022-23 impacts

11 AHSNs set up **34** communities of practice attended by **748** multi-disciplinary stakeholders including public and patients.

19 Integrated Care Boards (ICBs) have selected one or more of the NHS Business Services Authority (NHS BSA) Polypharmacy Prescribing Comparator therapeutic areas to focus on in partnership with their AHSN.

1,270 health and care professionals attended eight NHS BSA/AHSN joint webinars.

486 GPs and pharmacists and other prescribers have completed polypharmacy learning exercises to date.

142 patients have taken part in focus groups to test public-facing materials in partnership with AGE UK and other local voluntary groups.

19 ICBs were engaged in actively testing materials with patients and clinicians.

National programmes and initiatives

Preventing and supporting the management of cardiovascular disease (CVD)

Around seven million people in the UK live with cardiovascular disease (CVD). It is one of the biggest causes of death and disability in the UK, costing health services billions of pounds each year and is the major cause of the excess mortality that has occurred since the pandemic.



CVD, such as heart disease and stroke, is a leading cause of death in the UK, responsible for a quarter of all deaths each year.

High blood pressure and cholesterol are leading risk factors for CVD but both are highly modifiable, and with effective treatment we can substantially lower the risk of CVD.

AHSNs are supporting Primary Care Networks (PCNs) to systematically address cardiovascular risk factors in their local populations to optimise clinical care, self-management and widening patient access to relevant therapies.

Lipid management and familial hypercholesterolemia

Our Lipid Management and Familial Hypercholesterolemia (FH) programme is working collaboratively with healthcare professionals to reduce instances of CVD.

The programme aims to minimise inequalities across England through FH detection and lipid management optimisation, access to appropriate medicines and therapies and education for healthcare professionals.

HEART UK has partnered with the NHS Accelerated Access Collaborative (AAC) and the AHSN Network to provide a comprehensive education programme for healthcare professionals.

In 2022-23...

As part of the collaborative working with Novartis and NHS England, the AHSNs have launched three funded programmes: **13** system transformation projects increasing access to lipid management for people in Core20PLUS5 population groups; **80** Primary Care Networks provided with additional workforce support via pharmacy-led education and lipids optimisation; **12** collaborative lipids fund projects to support integrated care models.

Supporting the adoption of novel therapies

As part of the FH and Lipid Management programme, the AHSN Network is the delivery partner in England for the implementation of the novel therapy Inclisiran.

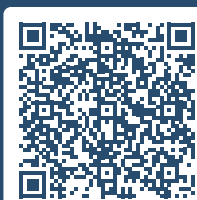
In September 2021, NICE approved Inclisiran as a new drug for treating people with high cholesterol who have previously experienced a cardiovascular event, to reduce their low-density lipoprotein (LDL) cholesterol. The new drug is given to patients in primary care as a twice-yearly injection.

AHSNs are working closely with clinicians to support them with the introduction of Inclisiran into local lipid management pathways. This support has included providing primary care teams with information, education and training to help teams prescribe the most appropriate treatment for patients.

Scan the QR code to find out more about our lipid management programme.



Find out more



In 2022-23...

Inclisiran is made available as part of the National Lipid Guidance in 60% of Primary Care Networks, with **81%** of all formularies recommending Inclisiran in primary care.



Blood pressure optimisation

High blood pressure is one of the major causes of CVD. Those in the most deprived communities are 30% more likely to have high blood pressure, the biggest single known factor for heart attack and stroke.

The national blood pressure optimisation programme worked by helping Integrated Care Systems (ICSs) to identify people with hypertension and optimise clinical care and self-management.

AHSNs supported their local ICSs and Primary Care Networks (PCNs) to implement the UCLPartners Proactive Care Framework for hypertension which supports primary care staff to identify and stratify patients with high blood pressure, use the wider workforce to support care, and provide patients with holistic care and supported-self management.

In 2022-23...

The Blood Pressure Optimisation programme's primary objective is to implement the UCLPartners proactive care frameworks to optimise clinical care and self care in hypertension. The secondary objective is to support case finding initiatives, all with an explicit focus on tackling health inequalities. Practices with the lowest treatment to target rates in March 2022 made the greatest improvements by December 2022. By March 2023, a total of **607** PCNs (just under half of all PCNs in England) were recorded as utilising the frameworks.

National programmes and initiatives

Supporting delivery of the Department for Health and Social Care (DHSC) MedTech Strategy

On 3 February 2023, the Department for Health and Social Care (DHSC) launched its inaugural MedTech Strategy, setting out how the health and social care system will reliably access safe, effective and innovative medical technologies, building on the Life Sciences Vision.

The strategy sets out three high level objectives; right product, right place, right price and outlines four strategic priority areas, developed with partners across industry, government and the health and care system, to deliver the objectives:

- Resilience and continuity of supply (to provide a broader range of supply options)
- Innovative and dynamic markets (through demand signalling and improved clinical leadership)
- Enabling infrastructure (better use of data whilst fostering industry partnerships)
- Specific market focuses (community and diagnostics)

The Accelerated Access Collaborative (AAC) and AHSN Network are part of the enabling infrastructure, supporting the identification, spread and adoption of medical technologies through our collaborative programmes. Our approach uses a combination of industry data and on the ground intelligence to understand existing levels of patient access and uptake of NICE recommended medical technologies across England, in a collaborative partnership with the AAC policy team, NICE, NHS Supply Chain and the technology suppliers.

This year will be key in the way that we support the spread and adoption of NICE recommended medical technologies into the health and care system through the MedTech Funding Mandate and InHIP initiatives.

National programmes and initiatives

MedTech Funding Mandate

In 2021, the MedTech Funding Mandate (MTFM) evolved from the Innovation Technology Tariff and Innovation Technology Payment (ITP) initiative and the need to support the NHS to support NICE recommended medical technologies. It sets out to mandate the use of local Integrated Care Board (ICB) commissioner funding for a set of NICE recommended medical technologies that are effective, cost saving within three years and with a budget impact of less than £20 million.

The four key objectives of the policy are as follows:

- Direct the NHS towards the most clinically and cost-effective medical technologies
- Use NHS local funding in a way that ensures implementation is sustained
- Support implementation of the most impactful NICE guidance by ICSs in England
- Accelerate equitable patient access to medical technology in England

By 2022-23, the list of technologies on the MTFM had increased from four to 11 and the AHSN Network has been supporting the adoption and spread of these, working closely with Integrated Care System (ICS) clinicians, commissioners, business managers and the technology suppliers to raise awareness, support implementation, understand barriers and share learning across England.

Find out more about the MedTech Funding Mandate by scanning this QR code.



National programmes and initiatives

MedTech Funding Mandate case studies

Challenge: Pre-eclampsia complicates up to 1 in 20 pregnancies. There is no cure, but diagnosing the condition early allows closer monitoring to reduce the risk of complications for both mother and baby.

90%
uptake
in eligible trusts*

PIGF-based testing

Placental growth factor (PIGF) based blood tests help predict the risk of pre-eclampsia quickly so that pregnant women receive the most appropriate care.

Based on adoption levels, we estimate that around **35,000** pregnancies are benefitting from PIGF testing per year in England.

* Eligible sites that have adopted or are in the process of implementing.



Challenge: Patients with stable chronic chest pain often require invasive diagnostic angiograms, which can delay a diagnosis.

60%
uptake
in eligible trusts*

HeartFlow fractional flow reserve computerised tomography (FFRCT)

Analysis creates a 3D model of the coronary arteries to help clinicians rapidly diagnose patients with suspected coronary artery disease from coronary CT angiography.

Approximately **6,000** patients per year across England are now benefitting from Heartflow as part of their heart disease diagnosis and treatment.



83%
uptake
in eligible trusts*

Challenge: Cluster headaches are rare but cause excruciating pain. They significantly affect a person's quality of life.

gammaCore

Non-invasive vagus nerve stimulation therapy for the treatment of cluster headaches.

There are now approximately **2,000** prescriptions of gammaCore per year across England.

* Eligible sites that have adopted or are in the process of implementing.

Challenge: Traditional methods of catheter securement can contribute to complications such as migration, dislodgement and infection, often resulting in catheter replacement or treatment for infections.

SecurAcath

Device to secure catheters for patients with a peripherally inserted central catheter.

80%
uptake
in eligible trusts*



National programmes and initiatives

Improving access to sickle cell apheresis

In November 2021, the Sickle Cell Society published the No One's Listening report, an inquiry into the avoidable deaths of sickle cell patients and the failures of the system to recognise and support people with the condition. A series of recommendations for how to improve sickle services in England was set out and the AHSN Network is working with the Accelerated Access Collaborative (AAC) team to respond to this need, through the MedTech Funding Mandate (MTMF) policy.

One of the NICE recommended technologies that we are now supporting on the MTMF is the Spectra Optia machine, which under NICE Guidance MTG28 can be used to enable automated red cell exchange (sickle cell apheresis) for sickle cell patients, optimising their treatment and care.



Coordinated nationally, delivered locally

Sickle cell pathways are commissioned nationally by NHS England Specialised Commissioning. The AHSN Network, led by Yorkshire and Humber AHSN, developed a national working group comprising stakeholders from the Haemoglobinopathy Coordinating Centres (HCC), NHS Blood and Transplant and the Accelerated Access Collaborative policy team, to develop a nationally coordinated approach to improve patient access to both machines and services 24/7 across England.

The national working group is working with the 15 AHSNs and the 10 HCCs to develop service improvement business cases that can be funded by NHS England Specialised Commissioning and are supported by localised Integrated Care System (ICS) resourcing for additional equipment.

This approach has already seen three of the 10 HCCs being supported to expand and improve patient access to their services and through this year we will be working with the other seven HCCs to do the same, ensuring great equity in access to sickle cell apheresis services for sickle cell patients across England.

'The work that the group is leading on alongside the Haemoglobinopathy Coordinating Centres is already starting to benefit sickle cell patient access to services across England. We're excited for the year ahead as we continue working collaboratively to improve sickle cell disease understanding, service quality, and access for patients.'

Subarna Chakravorty, Consultant Paediatric Haematologist, and National Specialty Adviser for Haemoglobinopathy, NHS England

National programmes and initiatives

Benign Prostatic Hyperplasia (BPH) and the minimally invasive procedure that changes lives

Four of the 11 NICE recommended technologies being supported through the MedTech Funding Mandate are innovative procedures for the treatment of Benign Prostatic Hyperplasia. Benign Prostatic Hyperplasia (BPH) is a common condition that generally affects men aged 50 and above, resulting in an enlarged prostate that can lead to discomfort and complications when passing urine.

Marcus Roberts, a 51-year-old company director from London had been living with a prostate problem since the age of 46, and had begun to experience challenges that were affecting his quality of life:

“After about a year I realised that this almost constant feeling of needing the loo wasn’t just a background problem, it was getting in the way of my life, and I needed to do something about it.”

Marcus consulted his GP who referred him to a urologist, following which

Marcus underwent a Prostate-Specific Antigen (PSA) test and an MRI scan to rule out prostate cancer and was diagnosed with Benign Prostatic Hyperplasia (BPH).

After a series of consultations, the urologist recommended The UroLift System, a minimally invasive procedure, as an alternative to the surgical procedure, transurethral resection of the prostate (TURP) which usually requires the patient to stay in hospital for one to three days.

“The whole process and the procedure were so simple. I was only in there for 30 minutes, and there was no negative impact after the procedure itself, but my quality of life improved massively.”

Supported by the AHSN Network’s involvement and aligned with the NHS England’s Getting it Right First Time (GIRFT) team’s objective to support elective recovery in a way that enables

improved patient choice over which procedure to have, 70% of eligible urology services are now offering UroLift to patients.

Our knowledge and expertise in this area is already seeing more eligible sites adopting the Plasma System (62%) and Rezum (42% of eligible services), which will continue to grow into 2023/24.

Innovation Collaborative

The National Innovation Collaborative for digital health is a learning and support network for health and care professionals delivering technology-enabled services to support people at home.

Commissioned by NHS England as part of its Regional Scaling Programme, it has been delivered in partnership with the national AHSN Network and led by

Health Innovation Manchester (HinM) from its November 2020 launch to the end of a third phase in June 2023.

Scan this QR code to watch a YouTube video about the work of the Innovation Collaborative.



Since 2020 we have...

- Supported more than **487,000** people at home, including **152,000** care home residents. Learning opportunities have included more than 30 focus groups, workshops, events and benefits learning sessions, with more than 100 partner organisations sharing their experiences with more than 3,100 peers from local, regional and national organisations.
- Other resources produced with local teams for local teams include 18 case studies, 11 videos, 14 podcasts, three animations, 24 newsletters, six rapid evaluations and 21 benefits and business case guidance documents.
- With a membership of nearly **2,300**, the collaborative was shortlisted for a national Healthcare Efficiency Through Technology (HETT) Unexpected Innovation Award as best Integrated Care Collaboration.

National programmes and initiatives

Innovations for Health Inequalities Programme (InHIP)

The Innovation for Healthcare Inequalities Programme (InHIP) aims to address local healthcare inequalities experienced by deprived and other under-served populations.

The InHIP programme is a unique collaboration between the Accelerated Access Collaborative (AAC), NHS England's National Healthcare Inequalities Improvement Programme and the AHSN Network, delivered in partnership with integrated care systems (ICSs).

The programme builds on the AAC and AHSN Network's achievements and learning to date in improving access to innovations in healthcare for the

general population through the Rapid Uptake Products and MedTech Funding Mandate programmes.

Project teams (comprising of clinical and non-clinical expertise) from across the country are working together with their local communities to identify, address and minimise healthcare inequalities through projects that aim to improve access to the latest health technologies and medicines.

2022-23 impacts

In November and December 2022, the AHSNs supported **38** of the **42** Integrated Care Systems (ICSs) to draw down an additional **£100,000** each of NHS England AAC funding to support InHIP project delivery – a total of **£3.8million**.



Looking ahead →

These AHSN/ICS collaborative projects will work in their communities to engage under-served populations, as set out in the Core20PLUS5 approach to tackling healthcare inequalities, with the objective of enabling improved access and experience of NHS health and care services and innovative medicines and medical technologies as part of their treatment.

Project delivery started in March 2023 and the impact that the projects have on peoples' lives will be tracked and captured during 23/24. InHIP will form a key component of the work that AHSNs do to reduce health and healthcare inequalities through innovation.

Sustaining our previous national innovation programmes

Long-term sustainability is an essential consideration for our national innovation programmes. AHSNs are experts in the adoption and spread of innovation, and in equipping our health and care systems with the processes, knowledge, and tools they need to sustain programmes without long-term support.

Helping people to relieve arthritic pain through exercise

The ESCAPE-pain programme, which stands for Enabling Self-Management and Coping with Arthritic Pain using Exercise (ESCAPE), was developed by Professor Mike Hurley at St George's University of London and Kingston University to help people with knee, hip and back pain.

In 2013, the ESCAPE-pain programme was identified by the Health Innovation Network (HIN) as a local innovation that was ready for adoption. Over the coming years, significant scale up was achieved, with support from Versus Arthritis, Sport England, and the NHS Innovation Accelerator (NIA).

In 2018, the AHSN Network adopted the ESCAPE-pain programme nationally and in 2020 it was named Musculoskeletal (MSK) Initiative of the Year by Health Service Journal.

The Health Innovation Network (HIN) began to look for a sustainable home to host the programme for the longer-term, and in April 2021 HIN entered into a partnership with national medical charity Orthopaedic Research UK (ORUK).

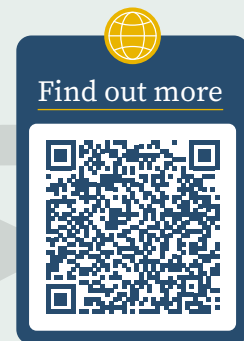


Although restrictions to social interaction during the pandemic had curtailed face-to-face activity for many months, the programme has continued to bounce back and now operates across more than 250 locations with more than 23,000 people having benefited from the programme.

ESCAPE-pain is currently part of an exciting 2-year initiative supported by Innovate UK's Healthy Ageing Challenge. The partners are exploring how gyms can be transformed into community MSK hubs to mobilise the leisure sector to deliver accessible health services for older adults with MSK conditions.

ESCAPE-pain has now gone digital and is free for use on both Android and Apple devices as well as on the web, via ESCAPE-pain Online. Through a partnership between the HIN and charity Orthopaedic Research UK (ORUK), the programme has established a long-term sustainable future.

The map below shows the current spread of ESCAPE-pain across the UK and Ireland.



ESCAPE-pain activity in numbers



250+
sites running
ESCAPE-pain as
of March 2023



23,000+
participants through
the programme
up to March 2023



£35m
total health and social
care savings over
2.5 years



2,400+
trained to deliver
ESCAPE-pain
up to March 2023



1
large scale 2-year
collaboration project



3
digital projects:
webapp, website
and app

Improving safety

Our 15 Patient Safety Collaboratives across England make their impact by identifying and deploying safer care initiatives throughout the health and care system.



2023-24 NatPatSIP programmes

- Managing Deterioration
- System Safety
- Medicines Safety
- Mental Health, Learning Disability and Autism
- Maternal and Neonatal

Patient Safety Collaboratives (PSCs) are funded and nationally coordinated by NHS England, and hosted locally by regional AHSNs. They are experts in identifying and rolling out safer care initiatives within the NHS and industry, ensuring these are shared throughout the health and care system.

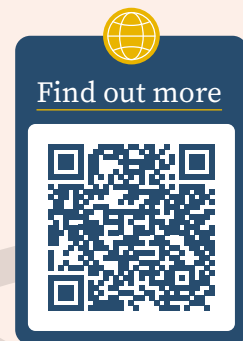
To do so, they deliver the National Patient Safety Improvement Programme (NatPatSIP) – a key part of the NHS Patient Safety Strategy – collectively forming the largest safety initiative in the NHS.

We have developed tangible measurement plans to demonstrate outcomes and impacts of our programmes and these impacts are now beginning to emerge. The data has helped us focus on where the need is and demonstrates improvements over time.

We are supporting front-line teams to deliver improvements by increasing the capability of quality improvement expertise through our coaching and training as well as supporting Integrated Care Systems (ICSs) and their boards to deliver the national safety improvement programmes through a new PSC support offer.

During our work in the pandemic we were able to spread the safer tracheostomy programme. The evaluation demonstrates real impact.

Find out more about our patient safety work, including our patient safety plan, by scanning this QR code.

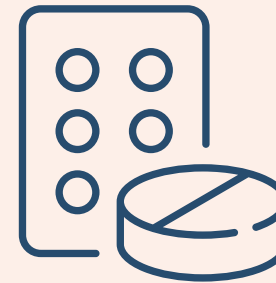


Patient safety impacts



Managing deterioration in care homes

- Work with **11,621** care homes to support
- Prevent up to **57,000** emergency admissions



Patient benefit from medicines safety

- Saving **347** lives
- Prevented **3,337** severe harms
- Avoided **19,263** readmissions

Maternity and neonatal safety

Improving the care of premature babies has:

- Saved up to **465** lives
- Prevented up to **385** cases of cerebral palsy



Mental health safety

- **15%** reduction in traumatising restraint, seclusion and rapid tranquillisation restrictive practices recorded in pilot work on **38** inpatient wards
- Working with all Mental Health Trusts in England to prevent more than **19,000** restrictive practices each year



Safer tracheostomy care

Improving tracheostomy care with:

- an average reduction in the total hospital length of stay of **33** days per admission
- an estimated saving of **£1.92m** per hospital per year in England



System safety

- Supporting the implementation of Patient Safety Incident Response Framework (PSIRF) in **all** NHS provider organisations in England

*Data current as of 25 May 2023. (Updated medicines data expected 6 June 2023.)

Supporting innovators

Supporting innovators and driving economic growth.

AHSN engagement with commercial innovators and clinical entrepreneurs focuses on advice and expertise across all stages of the innovation pathway, from discovery to deployment at scale. In addition to benefitting patients and saving the NHS money, this work supports the UK economy by attracting inward investment and creating or safeguarding jobs.

The 15 regional AHSNs work with organisations and entrepreneurs to support them to develop their ideas; offer them advice on whether there are identified needs for their solution in the NHS, and offer structured guidance on developing real world evidence, business case development, and how to secure funding.

Our commission with the Government's Office for Life Sciences (OLS) enables us to offer this support in a structured and systematic manner, responding to health and care needs and matching the ideas and solutions to the problem.

2022-23: AHSN Network industry and economic growth impacts



2,831
companies supported



5,488
interactions with companies



184
companies created long-term strategic partnerships



565
jobs created



764
jobs safeguarded



£428m
investment leveraged by companies supported by AHSNs

Long-term data

AHSNs have been measuring the collective economic growth impact of their work with innovators, since 2018. In that time AHSNs have

helped to secure £1.8 billion inward investment and have helped create or safeguard 6,625 jobs.

Supporting innovators

The AHSN innovator offer

All 15 AHSNs provide a consistent universal offer to innovators, which includes assessment and triage, advice and guidance and signposting.

The type and level of support depends largely on the needs and development stage of the specific innovation. For example, in the case of early-stage innovator support this may include advice and guidance on gaps in an innovator's value proposition or evidence base or helping to develop a proof-of-concept prototype.

For more advanced, pre-commercial innovations, AHSN support can extend to supporting with health economics, impact modelling, or brokering connections with health and care experts. For market-ready innovations, AHSNs can support with business case development, real-world evaluations and ultimately roll-out and adoption, where appropriate.

Taking a pipeline and portfolio approach gives AHSNs a structured way to support innovations into the NHS. Projects receive support at each of the three main stages:

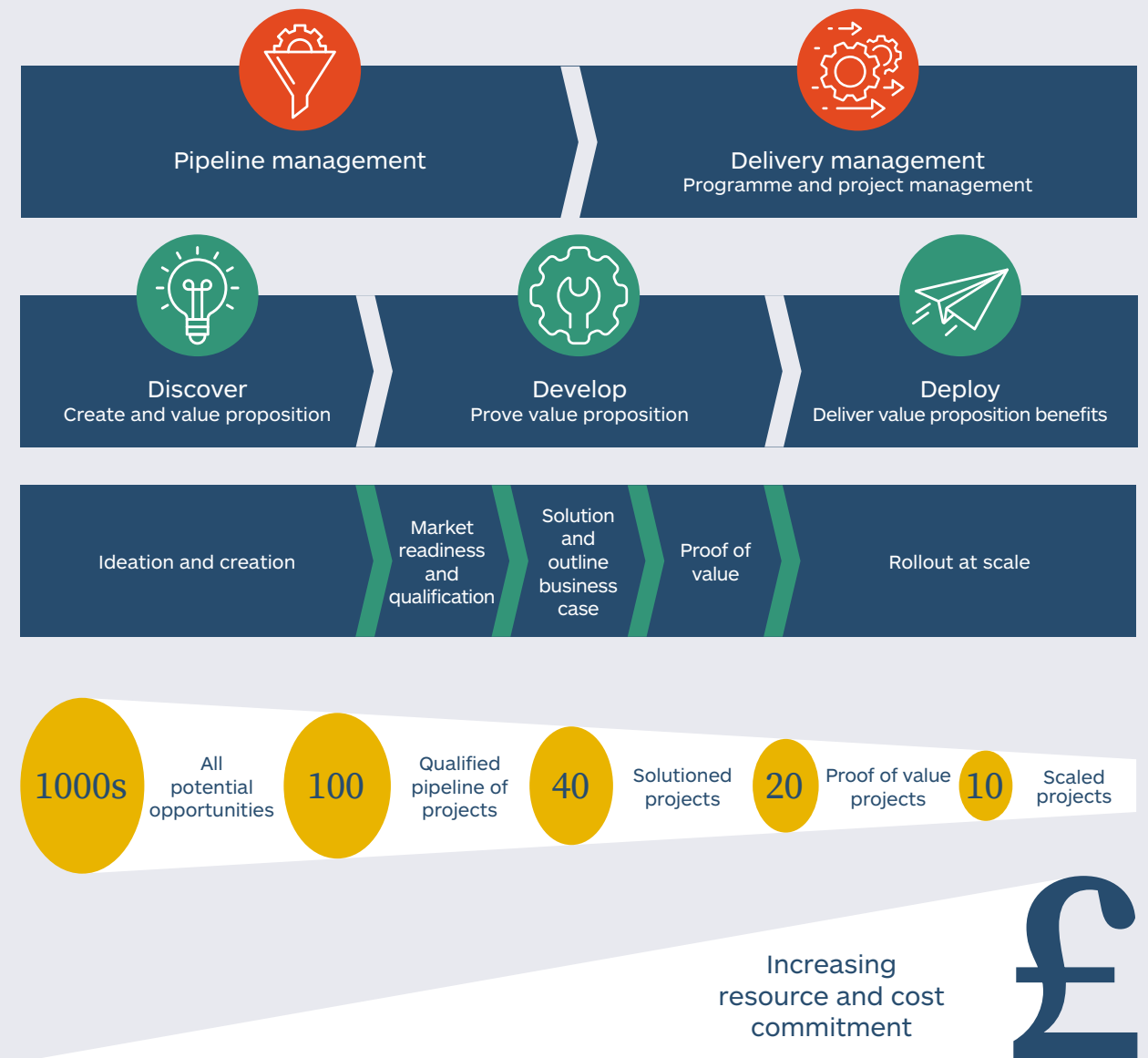
Discover - the creative process of generating and developing ideas into tangible proposals for progressing through the innovation pathway.

Develop - developing the innovation's market readiness and deploying into selected locations to test that the technology or service design works in a real world setting.

Deploy - linking to commissioning processes and rolling out the innovation to NHS organisations at scale.

Integrated Portfolio Management

Innovations, where AHSNs have supported, are shared nationally through the AHSN innovation pipeline, which now includes 1,512 innovations.



NHS Innovation Service

Alongside offering direct support to innovators, AHSNs are also key partners in the NHS Innovation Service, where health SMEs and entrepreneurs can register for advice and guidance on working with the NHS and to help scale and develop their idea. The AHSN Network runs the needs assessment service element of this programme, helping to signpost innovators to further support from the other partners, which includes NICE and the NHS Supply Chain. Use the QR code to find out more about the NHS Innovation Service.



In 2022/23

The AHSN Network supported NHS England to transition the NHS Innovation Service into public beta during 2022. Since the service has become publicly available, the AHSN needs assessment team has triaged 225 innovations.

NHS Innovation Accelerator

Since 2015, the AHSN Network has developed and delivered the NHS Innovation Accelerator (NIA) on behalf of NHS England. The NIA is hosted at UCLPartners. Innovators can apply to become a fellow on the programme, where they will receive mentoring and guidance to develop their concept. During 2022, the NIA supported ten fellows to develop their innovations. In March 2023, the NIA announced its latest set of 17 fellows to receive support for the coming year.

Since 2015

The NIA has supported close to 100 innovators as Fellows, which has resulted in more than 2,800 NHS sites that now use NIA supported innovations, acting as a gateway for adoption and scale of impactful solutions to help improve patient experience and outcomes; enhance the NHS; and retain, as well as build up, employment in the UK.

Small Business Research Initiative (SBRI) Healthcare

As well as overseeing the NIA programme, AHSNs also support partners with promoting opportunities for innovators to access funding through the Small Business Research Initiative (SBRI Healthcare).

In 2022/23

AHSNs supported organisations to bid for millions of pounds of funding for solutions to address health inequalities in maternity services, respiratory disease, learning disabilities and autism, and cardiovascular disease. Of the companies successful in securing SBRI funding 93% had been supported by AHSNs.



Economic growth case studies

Spirit Health

East Midlands AHSN has supported remote patient monitoring innovator Spirit Health since 2017. Spirit Digital joined the AHSN Digital Accelerator programme after a successful application aimed at supporting digital health innovators in their growth and expansion.

Spirit Health's flagship digital health product, CliniTouch, is an award-winning remote monitoring solution designed to empower patients to manage their long-term conditions from the comfort of their homes. The platform also provides clinical teams with essential tools and data to deliver remote care efficiently and effectively.

In response to the COVID-19 pandemic, the AHSN team introduced Spirit Digital to several NHS commissioners, resulting in the rapid deployment of their digital remote monitoring software. More than 5,000 patient interactions have now been completed remotely, reducing hospital admissions, ensuring patient safety at home, and improving overall health outcomes.

Clinitouch is also the proud technology partner in one of the most ambitious virtual ward rollouts in the NHS.

With the support of the AHSN, Spirit Health has secured £5 million in funding to develop further and expand their remote monitoring solution. This investment will help the company to achieve its vision of providing easily accessible virtual care at all levels of health and wellbeing, both in the UK and internationally. The goal is to create a system that better connects patients to their clinical teams, and healthcare providers can access everything in one place, improving care and creating efficiencies.

£5m

funding secured with support from East Midlands AHSN

Leo Cancer Care

Marie™ is an upright proton beam therapy (PBT) cancer treatment solution developed by Leo Cancer Care. This system delivers therapy to patients by keeping the radiation beam fixed and slowly rotating the patient in the upright position.

Kent Surrey Sussex Academic Health Science Network (KSS AHSN) supported Leo Cancer Care to evaluate if their products can bring cost savings and efficiency gains to the NHS. Specifically, KSS AHSN and Unity Insights, evaluated if Marie™ would be suitable within the NHS Proton Beam Therapy (PBT) cancer treatment pathway. A validation report, cost-benefit analysis, budget impact model, and a final evaluation report were delivered to determine this.

- The validation report found that using Marie™ may lead to faster set up times than current radiotherapy treatment and that the equipment used to build Marie™ was designed to lower costs.
- The cost-benefit analysis calculated the return on investment (ROI) for the NHS averaged at £0.61 for every £1 spent, and the ROI for Leo Cancer Care averaged at £0.91 for every £1 spent between years 2 and 20. Leo Cancer Care was suggested to yield a greater ROI compared to existing NHS machines.
- The final evaluation report concluded that Leo Cancer Care's Marie™ appeared to yield lower costs compared to NHS machines.

Using Marie™ in the future may result in a reduced backlog of patients and cost savings for the NHS. Further research is needed to build a stronger evidence base.

Stephen Towe, Leo Cancer Care said: "KSS AHSN knows everybody that we need to talk to. They know the roles of each of those different groups and can help connect us to the right people, but also help us to formulate and structure what we actually want from them. One of the key benefits of AHSNs is that they can be the go-between for industry and the NHS."

£26m

funding secured with support from Kent Surrey Sussex AHSN

Assura

Through its Primary and Community Care Programme, Wessex AHSN actively supports general practice to meet the priorities of the NHS Long Term Plan through innovation to address the challenges of an ageing population, the growing demand for services, and the need to be efficient with resources.

St Clements Partnership, a general practice surgery based in Winchester, Hampshire, has received approval from the city council and the local Integrated Care Board (ICB) to build a new surgery. The new practice project focuses on using digital technologies to support patient care and new ways of working, providing improved patient care, a more flexible and equitable service, and better workforce wellbeing.

In 2021, Wessex AHSN was co-commissioned by Hampshire & Isle of Wight (HIOW) Integrated Care Board (ICB) and specialist developer Assura plc to research potential innovations for the new building, and to evaluate how these innovations have benefited patients and the surgery workforce once implemented.

To date, Wessex AHSN has:

- Supported the business case for the new building
- Horizon scanned innovations for adoption by the practice

- Explored new ways of working and physical working space, to benefit both staff and patients.

Wessex AHSN provided 37 recommendations for novel ways of working within the facility, with a bespoke summary of innovations identified from the horizon scan and an exploration of process efficiency.

Recommended technologies included wearable technologies and smartphone apps across a number of long term conditions, a range of health kiosks, and condition-specific options for teledermatology, point-of-care diabetes screening, and hypertension monitoring.

You can read the report by scanning this QR code.



The St Clements team will take forward the recommendations that meet their needs most appropriately, with Wessex AHSN's Insight team evaluating their impact alongside the new working models.

£8m

funding secured with support from Wessex AHSN

Clinical Design Technologies

Proof of concept study gives investors confidence in physical device to standardise and modernise urine dipstick testing.

Wessex AHSN worked with Clinical Design, making introductions that resulted in developing and testing their value proposition in a real-world setting. A clear understanding of the NHS need, and how the system would be used in a clinical pathway, led on to proof of concept pilot, which in turn has given confidence to private investors to back further development of the technology.

Urine testing hasn't changed for decades. It can be messy and slow with subjective data capture. Results can vary with age of the sample, length of 'dipping' time and interpretation of the colour change under different lighting. Clinical Design Technologies Ltd set out to solve all these problems with a physical device to standardise and modernise the traditional dipstick test.

By 2020, they had a well-developed device with CE mark. However, they lacked clarity on the clinical pathway, value proposition for users, and the need for data integration.

Through its network of contacts at a major teaching hospital, Wessex

AHSN helped Clinical Design to undertake qualitative market research of the end-users' needs. With this expert clinical input, Clinical Design continued to develop their device, enabling among other things integration of results into the patient record.

Clinical Design's new understanding of end-user needs enabled iterative product modification to better fit the clinical pathway and meet the users' needs. The new understanding of Clinical Design's value proposition enabled design of a matching pilot and real-world evaluation, at the same hospital.

This closer working relationship with the NHS, and closer alignment to end-user needs and business case development has given investors confidence to back the Clinical Design team with further private investment.

The applications of this technology are widespread, with potential to improve patient outcomes through reduced error rates in testing and recording of results, and save staff time.

£5m

funding secured with support from Wessex AHSN

Cross-cutting priorities



Equality, diversity and inclusion

Championing equality, diversity, and inclusion in innovation helps ensure the ideas and solutions available to the NHS better reflect the communities it serves and in turn can better meet the needs of patients. As a Network, AHSNs collectively signed up to a shared set of diversity pledges, so we can hold ourselves to account on how we support, nurture and work with diverse innovators and SMEs.

In 2022-23 we have...

Updated our diversity pledges to reflect the post-pandemic landscape and gone on to embed these refreshed pledges across our teams. In summer 2022 we published a report on work by AHSNs to support diversity in our processes, programmes and the innovations we support.

Scan this QR code to read our latest report about our work on equality, diversity and inclusion.



Patient and Public Involvement

Engaging and involving patients and service users in the development of innovations is of paramount importance to the work of AHSNs. It's essential we design and spread innovation that transforms healthcare in partnership with patients, the public, carers, and communities so they can best address the needs of those they are designed to support.

In 2022-23 we have...

Collaborated with Boehringer Ingelheim and the University of Plymouth to develop the first of its kind, evidence-based guide to support digital innovators to conduct meaningful patient and public involvement and engagement (PPIE). Access the PPIE innovator guide on Boehringer Ingelheim's website by scanning this QR code.



Environmental sustainability



With over a million employees and many more people who depend on it, the NHS has acknowledged its impact on the environment by committing to becoming carbon net-zero by 2040, as one of a number of changes to become more sustainable.

In 2022-23 we have...

Supported around 100 innovators with a net zero benefit and briefed more than 200 innovators on net zero policy. Through more than 15 events, we have showcased 30 innovators and net zero best practice to more than 1,000 attendees. With our support, innovators have leveraged at least £5.3m of net zero investment. Find out more about our sustainability work by scanning this QR code.



Digital solutions and AI

Digital solutions and artificial intelligence (AI) provide significant opportunities to transform care in a way that is accessible and enabling. AHSNs have significant expertise in digital and AI solutions and are committed to being at the forefront of this agenda, helping the system realise the art of the possible.

In 2022-23 we have...

Continued to advise and support a growing number of healthtech innovators and entrepreneurs.

This year we also further developed our work within the Innovation Collaborative (see page 39 for more information) - a shared learning network supporting rapid deployment of innovative digital technologies that enable care to be delivered in the comfort of people's own homes.

Follow this QR code to read the AHSN Network perspective on digital and data innovation.





Digital solutions and AI case study: Improving stroke care

The Oxford AHSN is working with Integrated Stroke Delivery Networks (ISDNs) to evaluate brain imaging technology called e-Stroke which utilises AI to detect stroke patients suitable for thrombectomy and shares high quality computed tomography (CT) brain scans across hospitals quickly and securely. This supports clinical decision-making and rapid access to treatment, reducing long-term disability and improving patient outcomes. So far it has been introduced at 73 hospitals.

The approach has led to more patients receiving mechanical thrombectomy (MT) – an NHS Long Term Plan priority. Rates in evaluation sites have risen from 1.5% to up to 8%, compared to the overall national figure of 2.9%.

Scan the QR code to find out more about how we are improving stroke care .



Health inequalities

Through innovation and improvements to health systems, treatment pathways and care environments, the AHSNs are determined to widen access to care and create health equity across the population.

We are aligned with the national NHS initiative Core20PLUS5 and many of our programmes concentrate on this initiative's key areas of focus, such as maternity, mental illness, cardiovascular disease (CVD) and respiratory disease.

In 2022-23 we have...

Completed health inequality impact assessments for each technology being supported by the MedTech Funding Mandate programme. We are now working with the technology suppliers, NICE, NHS Supply Chain and the AAC policy team to ensure that our spread and adoption plans work to enable all patients in England to access the technologies, including those patients suffering health and healthcare inequalities.

The Rapid Uptake Product programme has evolved into the Innovation for Healthcare Inequalities Programme (InHIP), where we are supporting 38 of the 42 ICSSs to enable under-served populations improved access and experience of NICE recommended medicines and medical technologies. (See page 7 for more information.) Scan the QR code to find out more about what we're doing to help address health inequalities.



Workforce



Supporting the NHS to be more efficient through the introduction of new technology; pathways or initiatives, can release clinician time and improve patient care. The AHSN Network has a key role to play in this by identifying and supporting trusts and providers to spread and adopt innovative practices or tools, which help address the challenges faced by the workforce.

In 2022-23 we have...

Continued to support programmes and initiatives across the Network that have released clinician time, streamlined processes or delivered improvements for the NHS workforce. These endeavours have collectively released 179,846 hours of capacity.

Patient safety

Our patient safety plan was published in September 2019 in response to NHS Patient Safety Strategy: Safer culture, safer systems, safer patients and we remain committed to supporting the NHS Patient Safety Strategy. Working closely with our commissioners, system partners and front-line teams, we support improvement programme delivery, develop pipeline programmes and innovations, and provide insight and real world evaluation to inform future safety improvements.



In 2022-23 we have...

In 2022-23 we have focussed on understanding the health and safety inequalities and as a result we have developed programmes to support reducing these gaps such as PERIPrem for preterm babies and their mothers and reducing the use of high-dose opioid prescribing.



Patient safety case study: PERIPrem

Improving outcomes for premature babies

Preterm birth is the main cause of neonatal deaths and morbidity in the UK.

PERIPrem (Perinatal Excellence to Reduce Injury in Premature Birth) is a unique care bundle of 11 evidence-based interventions that reduce brain injury and mortality rates amongst premature babies.

Led by the West of England and South West AHSNs, in partnership with the South West Neonatal Network, AHSNs have supported all 12 hospital trusts across the South West region to introduce the care bundle.

Outcomes for preterm babies in South-West England during the PERIPrem implementation year improved, with a 37% reduction in severe brain injury and a 28% reduction in mortality, compared to baseline rates (2014-2019).

If replicated across England, the size of the benefit is likely to be:

- 280 fewer infant deaths per year
- 370 fewer babies suffering severe brain injury (cerebral palsy), with associated projected lifetime health and social care savings of at least £300 million per year.

Contact us

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