

West of England AHSN Impact review 2022-23

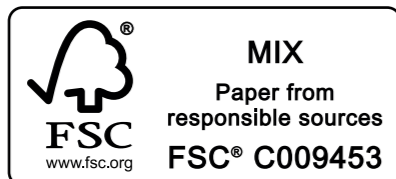
Integrating innovation: the art of the possible



West of England
Academic Health
Science Network

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Foreword

As the West of England AHSN celebrates its tenth anniversary, we are delighted to bring you our latest impact review.

We've come a long way together since we were first established by NHS England back in 2013 to speed up the spread and adoption of innovation in health and care. You can follow this journey on our timeline on pages 4 to 9.

Throughout this, our vision of creating a dynamic ecosystem for innovation founded on a collective approach to benefiting our local people has remained constant.

In this review we share case studies from the last 12 months, exploring how we collaborate with colleagues from health and care, industry, research and academia, the voluntary and community sector, and with patients and the public, to drive innovation and new approaches at every stage of the pipeline.

At the 'Discover' stage of our innovation pipeline (page 14), we support colleagues to be curious, ask questions and share their experiences to help us all better understand what we want innovation to achieve. We have nurtured active collaboratives and networks, bringing together all those who really understand health and care challenges to articulate the needs.

We help our local health and care community to foster an innovation culture, ready to embrace and develop new technologies and ways of working.

And of course we also work closely with healthcare innovators at this stage, acting as a critical friend through our business development support to equip them with the skills and insights to enter health and care as a market place.

Next comes the 'Develop' phase (page 18) – a time for experimenting, refining and testing innovations. In the last year, we've been incredibly busy identifying promising solutions, through our own Health Innovation Programme, as well as the national SBRI Healthcare and NHS Innovation Accelerator initiatives.

We've also supported many system partners to evaluate innovations in real world settings, from our Black Maternity Matters pilot (trying out new approaches to reducing health inequalities faced by Black mothers) to the Domiciliary Care Workforce Programme (testing the potential of AI to transform planning for providers of domiciliary social and health care).

Finally comes the all-important 'Deploy' stage where, as you'll see from the case studies on page 25 onwards, we've achieved significant success in exporting innovations developed here in the West further afield, such as the PERIPrem care bundle for premature babies, as well as 'importing' solutions from other parts of the country and through national programmes.

There can never be single blueprint for deployment, and from our case studies you'll see how we work closely with healthcare providers to help them



adapt their care pathways and practices to adopt innovative solutions, often using quality improvement (QI) methodologies.

We hope you agree we have much to celebrate in our tenth year. These achievements are credit not only to the AHSN staff team, but also to all those across the West of England health and care innovation community who have seized the opportunity to work with us to achieve our shared ambitions. And so to all of you, we say a heartfelt thank you.

NHS England has recently announced the AHSNs (under the new name of Health Innovation Networks) will be relicensed for a further five years, and so we look forward to continuing this work, and continuing to learn and grow together, in the coming years.

Natasha Swinscoe, Chief Executive of the West of England AHSN
Steve West, Chair of the West of England AHSN and Vice-Chancellor of UWE

Celebrating ten years of collaboration

2013

NHS England awards us our first five-year licence



Public and patient stakeholder consultation event

2014

We set up the South of England Mental Health Collaborative with neighbouring AHSNs

PReCePT launches in all five maternity trusts in the West of England to increase administration of magnesium sulphate to protect preterm babies



We hold our first industry connection event: telecommunications meets health

We launch the West of England Academy



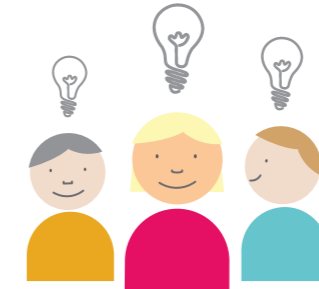
We establish the West of England Patient Safety Collaborative

2015



First innovators attend our annual Health Innovation Programme with SETSquared

We launch our Safer Care through NEWS (National Early Warning Score) programme



Our Design Together, Live Better citizen co-creation initiative kicks off

We establish our Emergency Laparotomy Collaborative

OpenPrescribing.net goes live

2017

We create our Evaluation Online Network



We set up our Mortality Reviews Collaborative

We establish our Emergency Department Collaborative

We support the West of England Genome Medicine Centre to recruit patients

2016

Evaluation and Evidence Works online toolkits go live

Adoption of NEWS announced as national clinical priority for NHS England based on our work in the West of England



Emergency Department safety checklist is recommended for national rollout and wins HSJ Patient Safety Award 'Best Patient Safety Initiative in A&E'

We launch the West of England Innovation Exchange

2019

We call for innovations to keep people healthy at home and support young people's mental health resilience in our new Future Challenges programme

ReSPECT

ReSPECT (Recommended Summary Plan for Emergency Care and Treatment) rolls out across Gloucestershire and Bristol, North Somerset and South Gloucestershire

Office for Life Sciences announces three-year funding for AHSNs to support innovators and industry



West of England AHSN announced BMJ's 'Patient Safety Team of the Year'

NHS England awards us our second five-year licence

2018

New online training launched for care home staff with Health Education England (now over 1 million views)



Two innovative youth resilience pilots launch as part of our Future Challenges programme: SmartGym Gloucestershire and MiHUB

Two new programmes selected for spread from our Evidence into Practice Challenge 2019 - PERIPrem and SharED

2020

KiActiv self-management pilots launch to support keeping healthy at home as part of our Future Challenges programme

PreciSSion

Launch of our PreciSSion collaborative - preventing surgical site infection across the region



Launch event for national rollout of PReCePT by AHSN Network



West of England AHSN wins HSJ Patient Safety Award for Deteriorating Patients and Rapid Response Systems

2021

We pivot our local work to support the Covid response

We support uptake of digital technology and online consultations in primary care and care homes

PERIPrem care bundle introduced across South West to protect preterm babies



We support scaling up of remote monitoring and Covid Oximetry@Home



We launch SharED in all six emergency departments in the West of England, supporting high impact users



Launch of 'Introduction to Innovation in Healthcare' – free online learning with University of Bath

Pathway Transformation Funding secured in West of England to support rollout of innovative treatment of asthma and lipid management

We support introduction of new child screening service to identify youngsters at risk of early heart disease



PreciSSlon wins Quality Improvement category at the BMJ Awards and Infection Prevention and Control Award at the HSJ Patient Safety Awards

COPD Digital CHAMP launches in Bristol, North Somerset and South Gloucestershire

2022

New PReciSSlon collaborative established to reduce surgical site infection following caesarean section

New project set up to improve non-invasive ventilation across the West of England

Domiciliary Care Workforce programme launches, testing AI logistics technology to support care planning

Our new report highlights support needed for people affected by bladder and bowel conditions




South West neonatal units celebrate highest delayed cord clamping rates in England as a result of PERIPrem




We lead rollout of the new national Polypharmacy programme across the AHSN Network


Our Black Maternity Matters pilot launches, working with two Bristol hospitals


2022/23 in numbers


54
innovators were supported by our industry and innovation team this year, receiving a total of **1,075** hours of our support


2,500+
patients have benefitted from FeNO testing to aid asthma diagnosis



£10.5 million
leveraged by innovators through grants and private investment with our support


525
patients using digital self-care app for people with COPD


62+ jobs created and **46+** jobs safeguarded


390+
people are now members of our South West Learning Disabilities Collaborative


34
communities of practice have been created across England through our national Polypharmacy programme



50%+
of primary care practices in the West are prescribing Inclisiran to help lower cholesterol



£2.5 million
funding awarded to companies by SBRI Healthcare with our support

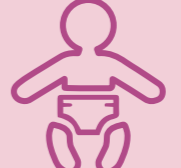

488
care staff attended our RESTORE2 training, helping them spot the signs of deterioration



3,626
people attended our online and in-person events and conferences


3,222
people accessed support and resources via our online Innovation Exchange

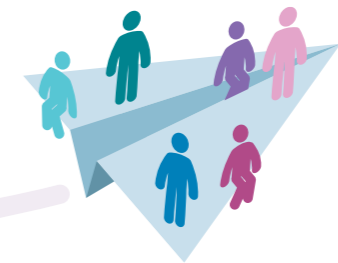
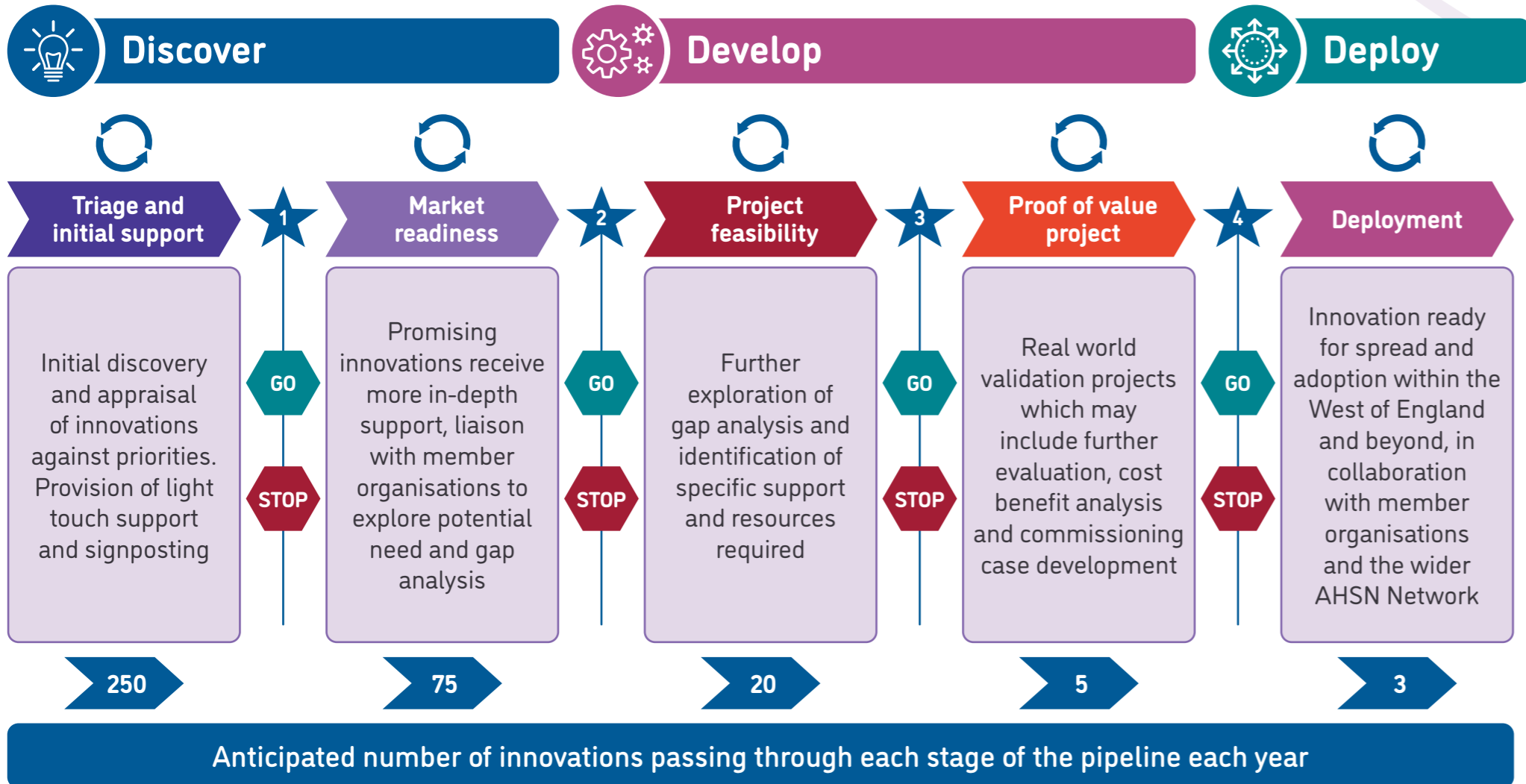

134
innovators have attended our Health Innovation Programme (HIP) since 2015


67%
reduction in hospital admissions for high impact users through our SHarED programme


1,989
babies have been cared for using our unique PERIPrem perinatal care bundle to date


428
children and young people were supported by our Focus ADHD programme this year

Creating an innovation pipeline for the West of England



Our core mission as an AHSN is to speed up the discovery, development and deployment of innovations so that the benefits are available to patients and clinicians earlier and faster.

Over the last ten years we have supported the creation of a vibrant innovation pipeline for the West of England, enabling our health and care ecosystem to identify, nurture and adopt products, services and pathways that meet local needs and priorities.

The primary objective of our pipeline is to find relevant solutions with clear evidence

of effectiveness and that are ready to be adopted by our health and care partners. This is realised through a process of needs identification, innovator support and signposting, and real-world validation.

Each stage is informed by ongoing engagement and partnership with local health and care professionals and with our three local integrated care systems.

All 15 AHSNs across England share data from their local innovation pipelines, enabling the import and export of innovations across the country via the AHSN Network.



Discover

Identifying promising solutions to meet health and care needs

Discover



Innovation starts not with solutions, but with questions or challenges. Often the initial role of the West of England AHSN is in helping to define the problem.

Our work programme is designed to respond to the priorities of our local health and care systems for innovation and improvement. We have nurtured active networks and communities of health and care professionals, bringing people together to help them collectively identify and articulate the needs and challenges that would benefit most from new approaches.

Another important role for the AHSN is to develop capability and expertise around the development and adoption of innovation. We support our local health and care community to think and work innovatively and implement new ways of working using design thinking and quality improvement (QI) methods and tools.

Many innovations show early promise, but selecting those that can be applied to genuine needs, and then refining them is the next critical stage. We work with many healthcare innovators at this stage, inspiring and equipping new entrepreneurial talent through our business development support and our online Innovation Exchange.

Nurturing active networks

South West Learning Disabilities Collaborative

On average, people with a learning disability die 20 years younger than their peers. Many of these deaths continue to be from avoidable causes, such as pneumonia and sepsis.

We established the West of England Learning Disabilities Collaborative in 2019 to help tackle this disparity in life expectancy and equity of care. The collaborative shares learning and best practice and is open to healthcare professionals, experts by experience, carers and family members.

In 2022/23 the collaborative was expanded to cover the entire South West region. It is now funded and delivered in partnership with NHS England South West and has over 390 members.

Recent activity has focused on cancer care, spotting the soft signs of deterioration through tools such as RESTORE2, and annual health checks. 72% of people with a learning disability in our region had an annual health check in 2021/22.

www.weahsn.net/ldc

Regional Perinatal Equity Network

Our Regional Perinatal Equity Network was launched in July 2021 by the West of England and South West AHSNs. It provides an opportunity for

“Marginalised groups have had information extracted for the comfort and convenience of professionals and the system for too long - the acronym ‘BAME’ being an example of lumping the ‘global majority’ into a four-letter acronym despite it being reductive and damaging.”

“My work with the AHSN on projects such as the Regional Perinatal Equity Network and Black Maternity Matters will continue, and as part of that we’ll continue to explore the power of language and why it is so important in starting and continuing the conversation to ultimately improve patient safety and care.”

*Katie Donovan Adekanmbi,
Inclusion and Cohesion
Specialist, BCohCo*



those working within maternity and newborn services and related organisations, along with parents, to come together to learn and share ideas.

Network meetings have featured speakers on national approaches to tackling maternal inequity, including representatives from the NHS Race and Health Observatory and the Race Equality Taskforce at the Royal College of Obstetricians and Gynaecologists. On a more local level, partners involved in our Black Maternity Matters project have shared their personal and professional experiences with the network in setting up support organisations for Black mothers, focusing in particular on the power of language.

www.weahsn.net/rpen

Reducing prescribing of opioids

We have been supporting Bath and North East Somerset, Swindon and Wiltshire (BSW) integrated care system to establish their system-wide framework to reduce harm from opioids and dependence-forming medicines.

We brought stakeholders together to create a shared vision and action plan, including a measurement plan to improve the management of chronic pain by reducing harm from opioids.

Through an established BSW opioid harm reduction working group, aligned to local medicines safety governance structures, three areas of priority were identified, including short, medium and longer-term improvements. These were: improving confidence of clinicians working in primary care; improving collaboration and prescribing between primary and secondary care; and improving integrated care records for people on dependence forming medicines.

Alongside this, we helped to share learning across all three of our local integrated care systems, providing webinars and resources to support broader learning.

www.weahsn.net/medicines-safety

Articulating the need for innovation

Create Open Health: Voices for Change

Voices for Change was a partnership project between the West of England AHSN, the Bladder and Bowel Health Integration Team (BABCON HIT) at Bristol Health Partners and Disruptive Thinking, as part of our Create Open Health open innovation programme.

Its purpose was to give a voice to those living with bladder and bowel conditions to identify need and share suggested improvements with the sector. The long-term aim is to initiate positive change.

During the discovery phase, we reached out to people with bladder and bowel control issues, as well as those caring for them, to gather valuable insight from those with lived experience. We especially wanted to hear from people who are disproportionately affected and from under-represented groups, and we offered an inclusive and accessible approach for information gathering.

In November 2022, the project's final output – the Voices for Change report – was presented at the House of Commons to the All-Party Parliamentary Group (APPG) for Bladder and Bowel Continence Care, at which there was strong consensus and support for the themes and priorities moving forwards. The report has also informed NHS England's national primary care clinical pathway for constipation in children.

www.weahsn.net/voices-for-change

"The Voices for Change project that I was privileged to be involved in provided a much-needed opportunity to really hear the voices of people who experience bladder and bowel leakage and what it is like to live with this day in, day out."

"The people involved were incredibly humbling, talking so candidly about the difficulties they face and their desire to see things improve for themselves and the many other people also affected."

*Nikki Cotterill,
BABCON HIT Director,
Bristol Health Partners*



Building capability and sharing knowledge

West of England Academy

Our popular Academy delivers a wide range of support and events to help health and care professionals and industry innovators gain knowledge and develop essential skills for innovative thinking and working.

Last year's virtual events and training included human-centred product design and development, a three-part adoption and spread series, and an introduction to design thinking. We also held face-to-face sessions on improvement coaching skills and psychology for quality improvement (QI) and we are working closely with our integrated care boards to develop bespoke support for their teams.

The Academy has continued to expand its range of online resources, including a new QI workbook and a creative problem-solving toolkit for design thinking, all of which are freely available on our website.

www.weahsn.net/academy

"The practical skills and frameworks are fantastic and such a great way to engage and inspire others. They will definitely help identify why a challenge is a challenge and instigate conversations about how we can overcome and/or improve processes."

Feedback from Academy training delegate



Evidence repository

Promoting a culture of shared learning and collaboration, our Evidence Repository is a portal for safely sharing non-peer reviewed documents that are not published elsewhere.

Established in 2020 in partnership with local integrated care systems and hospital libraries as the COVID-19 pandemic unfolded, the repository supports rapid evidence sharing of grey literature.

The numbers of registered users and uploaded documents continue to increase and in response to feedback we have expanded the membership to include public health organisations, as well as broadening the content to include quality improvement and population health management projects.

www.weahsn.net/evidencerepository

Supporting innovators

We bring a whole system approach to matching innovation to locally identified challenges by connecting and brokering relationships between innovators, industry, researchers and academics, and health and care colleagues.

By being embedded in our local health and care systems, we understand the innovation needs of the NHS and social care and share these insights with innovators, providing essential guidance and signposting to all those developing products and services with the potential to improve patient outcomes.

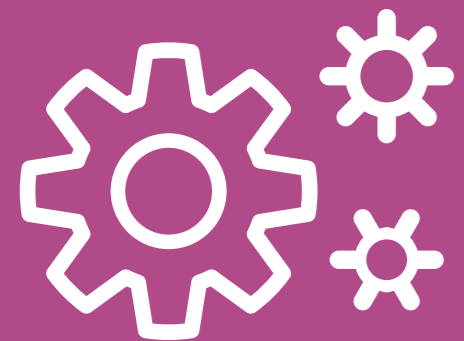
Through its support to innovators over the last year, our industry and innovation team has helped companies to leverage £7 million through grants and private investment, and a further £3.5 million for university-based innovations.

Innovation Exchange

Our online Innovation Exchange is designed to help innovators understand health and care challenges and connect innovators to the support they need, including:

- local and national funding
- a range of business support services and business development programmes
- online guides, toolkits and resources
- information on our strategic partners, their services and opportunities for collaboration
- case studies on innovators we have worked with.

www.innovationexchange.co.uk



Develop

Bringing together innovators and providers to accelerate proof of value and market readiness

Develop

This phase in the innovation journey is all about bringing together innovators, researchers, health and care providers, patients and service users and other stakeholders to experiment, prototype, test and make a business case for new solutions and ways of working.

We work with innovators to refine their ideas and develop them into viable business propositions that could have a real impact on health outcomes.

And we work with service providers to identify promising innovations and evaluate these in real world settings, considering the cost benefits and building an evidence base for wider spread and adoption.

This is what innovation is all about: collaborating with others on shared goals, finding and nurturing ideas with real potential, exploring how they can be implemented and demonstrating they offer benefits.

Helping innovators develop viable business propositions

Health Innovation Programme

Our Health Innovation Programme (HIP) is a business development bootcamp for healthcare entrepreneurs from clinical, lived experience or commercial backgrounds, which helps them test the validity of their business models and understand how to pitch their propositions in a complex NHS business landscape.

We work in partnership with the global number one university business incubator, SETSquared to deliver HIP locally once a year.

Our ninth cohort of HIPsters graduated in December 2022, bringing our total HIP alumni to 134 since 2015.



Innovations being developed by these latest graduates are wide-ranging, and include a phone-attachable skin imaging lens to aid the diagnosis of skin cancer, a digital social care staffing platform and a sleep paralysis support app.

www.weahsn.net/hip

"The West of England AHSN has played a fundamental role in our innovation journey, which started out on its Health Innovation Programme in November 2020. This experience was crucial for the development of our business and the design of our clinical trial. It provided the time and expert feedback to work through the different value propositions for all stakeholders in the NHS and beyond. This has been critical in bringing together our partners for the clinical trial, raising investment, and developing our product for the trial."

Joshua Steer,
Founder of Rarii Devices



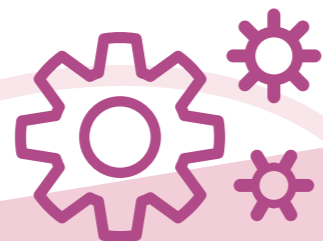
SBRI Healthcare

SBRI Healthcare is an NHS England Accelerated Access Collaborative programme, managed by LGC Group and supported by the 15 AHSNs. It helps companies to develop innovative technologies that match the needs of the health service.

In the latest round of SBRI Healthcare competitions, an impressive £2.5 million was awarded to six companies supported by the West of England AHSN. This will help fast track their innovations into the NHS to tackle known challenges around sustainability, stroke, health inequality in maternity care and respiratory disease. These companies are:

- **Airway Medical**, which produces suction and oxygen therapy equipment for clearing blocked airways in emergency and chronic conditions
- **Anya**, creator of an award-winning breastfeeding and early parenthood support app and a graduate of our Health Innovation Programme
- **Evolv**, developer of a virtual therapy platform to treat neurological and age-related conditions from hospital to home
- **LabCycle**, a world-first circular plastic consumables supply chain for healthcare systems
- **myMHealth**, which provides digital therapeutic platforms to support the management of long-term health
- **Revolution Zero**, a sustainable, zero waste targeted medical textiles initiative.

www.sbrihealthcare.co.uk



“The West of England AHSN has played an important role in our SBRI funding success, giving us insight into NHS need, helping us to shape our value proposition, and signposting us to and guiding us through the application process. Based on our experience, we would highly recommend that any company with aspirations to work with the NHS contact their local AHSN.”

David Fried,
Chief Executive of Evolv



NHS Innovation Accelerator

The NHS Innovation Accelerator (NIA) is an award-winning NHS England initiative, working to support NHS Long Term Plan priorities by accelerating uptake of promising innovations for patient, population and NHS staff benefit. It is commissioned by the NHS Accelerated Access Collaborative, hosted by UCLPartners and delivered in partnership with the AHSN Network.

In 2023 17 new Fellows joined the programme for support with their innovations, including three that have been backed by the West of England AHSN:

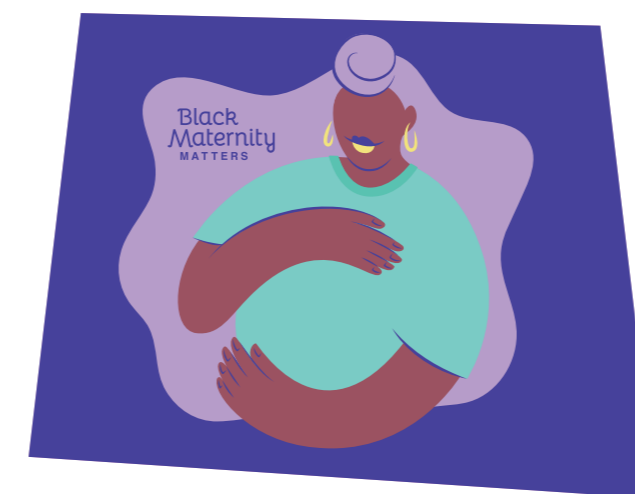
- **Anya**: a cutting-edge 3D interactive technology to help new mothers learn breastfeeding skills. Virtual communities and AI-powered support provide personalised around-the-clock assistance for parents throughout the first-1,001 days of their child's life.
- **Procomp Solutions**: an AI-assisted technology to optimise logistics and increase capacity, which can help hospitals to increase their discharge rates through the reduction of domiciliary care service mileage.
- **Emergency Role Allocation System (ERAS)**: a patient-centred, emergency-support software system that is improving safety in maternity by supporting teams to respond efficiently to obstetric emergencies. The system is the brainchild of a midwife, Caroline Lacy of Somerset NHS Foundation Trust, who has been supported by the West of England and South West AHSNs.

Supporting service providers to evaluate innovative ways of working in real world settings

Black Maternity Matters

Black women are four times more likely to die during pregnancy or in the postnatal period than White women. Stillbirth rates of Black and Black British babies are over twice those for White babies.

We've developed the Black Maternity Matters project in partnership with Representation Matters, BCohCo and Black Mothers Matter to deliver meaningful, actionable improvements to reduce inequity of outcomes for Black women within maternity systems through a collaborative quality improvement (QI) approach.



“We are really looking forward to taking this programme and its contents to the next level. As facilitators we have grown, and our knowledge of the clinical, procedural and systemic ways racism is showing up in maternity services has deepened. The first cohort experienced it as ground-breaking, and we could not be more delighted to be influencing real behaviour change. Building the change is what we are committed to do!”

Aisha Thomas of
Representation Matters



In 2022 we ran an eight-month pilot with midwives and maternity support workers from North Bristol NHS Trust and University Hospitals Bristol and Weston NHS Foundation Trust, who took part in training examining unconscious biases and the role of the individual in perpetuating unsafe systems of care for Black women.

Evaluation of the pilot phase of Black Maternity Matters shows the project has successfully helped to improve their knowledge and skills associated with cultural competency.

Informed by the evaluation of the pilot phase, we will deliver two further programmes of the Black Maternity Matters training in 2023/24 in Bath and North East Somerset, Swindon and Wiltshire, and in Gloucestershire, as well as another programme in Bristol, North Somerset and South Gloucestershire.

Non-invasive ventilation

Mortality rates for patients in England requiring acute non-invasive ventilation (NIV) for type 2 respiratory failure is higher than in many other countries.

In December 2022 we launched a new project to reduce mortality rates for patients who require acute NIV. We are collaborating with all six acute hospitals across the West of England to implement an evidenced-based care bundle known as 'NIV 5'.

The project also aims to improve staff knowledge of NIV care, alongside supporting a positive patient experience through more effective communication.

An evaluation exploring this project will be completed by December 2023. This will inform the potential for adoption and spread of the care bundle and collaborative approach beyond the West of England.

www.weahsn.net/niv

“With the support, structure and guidance of the West of England AHSN, and the enthusiasm of many NIV physicians, nurses, physiotherapists and AHPs across the South West, we have been able to reinvigorate this project.”

Rebecca Mason,
Respiratory Consultant,
Royal United Hospitals Bath
NHS Foundation Trust



“Caesarean birth is one of the most common procedures performed, and wound infection has been estimated to be about 15%. However, reporting the infection rate is not nationally mandated, so it is not reliably recorded. We therefore want to measure wound infection rates in mothers having a caesarean birth in all hospitals in the West of England, and to reduce it by 30%. We estimate that this could prevent circa 450 mothers in our region from having a wound infection.”

*Lesley Jordan,
Consultant Anaesthetist
and Patient Safety Lead,
Royal United Hospitals Bath
NHS Foundation Trust*



Working together to reduce caesarean birth infections

Building on the success of our award-winning PreciSSlon project to reduce surgical site infections (SSI) after elective colorectal surgery, we launched a new collaborative focused on preventing SSIs following caesarean births.

Since October 2022 we have baselined data and designed the new care bundle. During 2023/24 we will embed the bundle across our six trusts and evaluate our progress. We are also working with our local Maternity Voice Partnerships to co-produce materials with mothers and their families.

www.weahsn.net/caesarean-ssi

Domiciliary Care Workforce Programme

We are leading an evaluation programme to test the potential of artificial intelligence (AI) logistics technology to transform planning for providers of domiciliary social and health care and improve the working lives of their staff – and ultimately, the quality of service provided to patients in their own homes.

Delivered in partnership by the West of England and South West AHSNs, Health Education England, Bristol City and Cornwall Councils, the Domiciliary Care Workforce Programme is running two pilot schemes in Bristol and Cornwall.

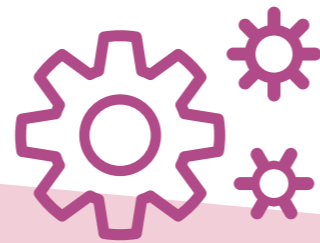
Following an open call, Finnish company Procomp Solutions was selected as the innovation partner for the programme. Procomp has a strong track record in logistics planning and optimisation, and around 75% of retail food distribution in Finland is organised using their systems. In 2011 they spotted the potential of their systems for the home care sector, and now support around a third of the Finnish home care workforce.

The Domiciliary Care Workforce Programme is testing three different scenarios, each of which aims to reduce the distance travelled by care workers and increase their capacity.

Early findings show there is an opportunity to reduce mileage by up to 65% and improve utilisation of the workforce by 30%. We are

undertaking a real-world evaluation to assess to what extent the opportunity can be delivered by councils and home care providers.

The pilots will run in Bristol and Cornwall through to autumn 2023, with a full evaluation report due to be published by early 2024.



“Through these pilots we’ll be looking to find improved ways of commissioning and organising home care using our AI logistics solutions. We’ve been working with the care home sector in Finland, Belgium and the Netherlands, and we’re excited to now be working in the UK for the first time with the support of the AHSNs.”

*Mark Russell-Smith,
Director of International
Operations for
Procomp Solutions*



Innovation for Healthcare Inequalities Programme

We’re working with project teams and local communities across the West of England to reduce healthcare inequalities through two new projects designed to improve access to the latest health technologies and medicines.

NHS England’s Innovation for Healthcare Inequalities Programme (InHIP) seeks to address local healthcare inequalities experienced by deprived and under-served populations. It is a unique collaboration between the Accelerated Access Collaborative, NHS England’s National Healthcare Inequalities Improvement Programme and the AHSN Network, and delivered in partnership with integrated care systems.

In our region we are working with Bath and North East Somerset, Swindon and Wiltshire and Bristol, North Somerset and South Gloucestershire integrated care systems on innovative projects focused on reducing cardiovascular disease through lipids optimisation, a clinical priority within NHS England’s Core20PLUS5 strategy.

www.weahsn.net/inhip

“Community health and wellbeing workers will see if they can build a relationship and trust. Initially the focus will be trying to help people with their cholesterol. But they’ll then also look at other prevention opportunities for the individual and members of the whole household, like cancer screening and vaccinations, use of social prescribing and linking into council services.”

*Julie Davidson,
Group Operations Director
for Pier Health Group,
North Somerset*



Speeding up clinical diagnosis of cardiac arrhythmias

Zio XT is a complete and clinically proven ambulatory ECG monitoring service, utilising powerful AI-led processing and analysis to support clinical workflows and improve the diagnostic yield and timeliness of cardiac monitoring.

We have been supporting iRhythm, the digital healthcare company behind Zio XT, since 2018 to get their product market-ready. It is hoped this technology will help to reduce waiting list time, prevent unnecessary journeys to and from hospital, release staff capacity and reduce the number of repeat tests performed.

We are working with North Bristol NHS Trust on a ‘proof of value’ project to assess the impacts of their use of Zio. Our support focuses on pathway transformation and a retrospective analysis of trust and company data to confirm impact and if applicable, inform a case for future potential commissioning within their cardiology pathway.

www.weahsn.net/zio

“The support from the West of England AHSN has been invaluable in helping us to establish the value of using a technology of this kind within the cardiology pathway in the trust. We are eagerly anticipating the results of the evaluation and hope that they will help us to make a decision about commissioning this type of technology in the future.”

*Suzanne Hatfield,
Cardiac Physiology Manager
at North Bristol NHS Trust*

Evaluating a new frailty service in South Gloucestershire

Research suggests that housebound and frail patients are less likely to access the care they need despite having higher rates of co-morbidity, functional impairment, and mortality than their non-housebound counterparts.

Yate and Frampton Primary Care Network (PCN) have implemented a new frailty pathway to better support frail patients through use of a more holistic and person-centred approach.

The West of England AHSN supported the development of the frailty pathway and coordinated a service impact evaluation by Unity Insights. The evaluation shows patients feel less isolated and better able to manage their health as a result of the service.

The PCN will keep delivering the frailty service through to March 2024. Further evaluation will be carried out (available in early 2024) to inform the potential continuation of the service. As there's lots of interest in this model, findings will be shared from both this initial evaluation and the next phase with other localities to help inform their approaches.

www.weahsn.net/frailty-evaluation

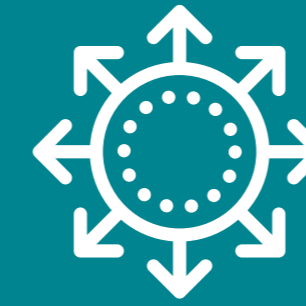
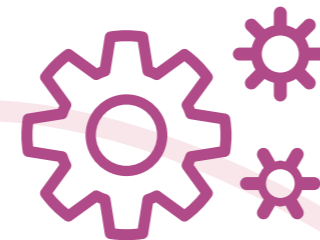
Reducing restrictive practice

As part of our local delivery of NHS England's Mental Health Safety Improvement Programme, we've focused on the national ambition of reducing restrictive practice incidences by 25% in inpatient mental health, learning disabilities and autism wards.

We have worked with two mental health trusts, Avon and Wiltshire Partnership and Gloucestershire Health and Care, to develop and test a range of change ideas with patients and experts by experience.

This has included reviewing and reducing or removing unnecessary blanket restrictions in mental health wards, developing new discharge processes for patients with a learning disability, and positive behavioural support 'scenario' training for staff.

www.weahsn.net/mental-health



Deploy

Supporting the health and care system to adopt and spread proven innovations

Deploy



As innovations develop into real world solutions and services, the role of the West of England AHSN shifts to identifying and supporting those with the greatest potential to improve health and care across our region.

Through our 'evidence into practice' approach, we select innovations with a proven clinical evidence base to spread more widely across our local systems. Our role is that of a facilitator or guide encouraging adoption and spread, using quality improvement approaches to continue testing, learning, adapting and refining.

Adoption of innovation is rarely a straight road. Even with credible evaluation and strong clinical evidence, it is not always simple to implement a new solution or service. We work closely with healthcare providers to help them adapt their care pathways and practices to adopt innovative medical devices, diagnostics and technologies.

Evidence into practice

Improving the management of high impact users in emergency departments

An NIHR ARC West evaluation of our programme to improve how 'high impact users' of emergency departments (ED) are managed, has shown it to be successful in reducing ED attendance and hospital admissions among these patients.

In England, patients who attend EDs five or more times a year represent 2% of attendees but account for 11% of attendances. These patients, known as high impact users, have often experienced extremely challenging situations in their lives. This can include experiences of violence, exploitation, alcohol and drug abuse, homelessness, chaotic life conditions, chronic pain, complex medical conditions, and mental health conditions.

Our 'Supporting high impact users in emergency departments' (SHarED) programme supported all six EDs in the West of England to introduce personalised care plans for high impact users.

Across the 148 high impact users enrolled during the six months before and after the programme, SHarED led to a 33% reduction in ED attendance and a 67% reduction in hospital admissions.

www.weahsn.net/shared

"The SHarED project has propelled our work to support some of the most vulnerable, marginalised patient groups in society, who access EDs frequently for a variety of reasons. Working with teams from all over the West of England, we've educated staff and supported patients to work towards safer patient care and an improved experience for patients and staff. It's a fantastic example of cultural change across the whole patch."

*Rebecca Thorpe,
ED Consultant,
University Hospitals
Bristol and Weston
NHS Foundation Trust*



Implementing a unique care bundle for premature babies

Since April 2020 we have worked in partnership with the South West AHSN and South West Neonatal Operational Delivery Network on the rollout of our award-winning PERIPrem care bundle, co-designed with parents and clinicians, to improve the outcomes for premature babies. It is now in use in all 12 maternity trusts across the South West region.

The bundle consists of 11 perinatal interventions, including delayed cord clamping, early breast milk and administration of magnesium sulphate. These have been shown to have a positive impact on brain injury and mortality rates amongst babies born prematurely.

Quality improvement (QI) methodology was at the heart of implementation, alongside coaching and forging new ways of working. Clinicians from obstetrics, midwifery, and neonatal care joined together as a perinatal community to drive forward and revolutionise care for preterm babies.

To date at least 1,989 babies in the South West have been cared for using the PERIPrem bundle. Modelling indicates that if PERIPrem were adopted nationally, the lifetime health and social care costs avoided by the NHS resulting from severe brain injury for very preterm babies would be in the region of £290 to £370 million per year.

The National Neonatal Audit Programme's latest report showed units across the South West achieved on average the highest rate of delayed cord clamping at 68.1% (against a national average of 43%). Evidence shows that delayed cord clamping reduces death in preterm babies by nearly a third.

On average, South West units also achieved the second highest rates of maternal early breast milk, the second lowest rates of necrotising enterocolitis (NEC) and the third lowest rates of mortality to discharge for babies born at less than 28 weeks across England.

PERIPrem Cymru launched in Wales early in 2023, and we have supported its adoption and spread through sharing and adapting materials developed during the initial project. NHS Wales Executive have commissioned us to provide programme management and clinical leadership support during the initial set-up phases of PERIPrem Cymru.

www.weahsn.net/periprem

Supporting diagnosis of ADHD

Along with AHSNs across the country, we have continued to implement objective testing using the QbTest tool to support diagnosis of attention deficit hyperactivity disorder (ADHD) and reduce waiting times through our Focus ADHD programme.

Diagnosis of ADHD can take significant time and resources, with an average 18 month wait for accurate diagnosis.

We have supported six children and adolescent mental health services (CAMHS) or community paediatric services in the West to implement QbTest. In our region, 428 patients were assessed in 2022/23 using the QbTest, and a total of 715 patients since the start of the programme.

Together with the South West AHSN we host a community of practice, exploring innovation needs on the children and young people's neurodiversity pathway. The online community is open to commissioners and service leads in children and young people's mental health, as well as those working in community paediatric services, supporting ADHD assessment.

www.weahsn.net/focus-adhd



Supporting national spread and adoption

Polypharmacy: getting the balance right

In England, NHS primary care dispenses over 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.

“Just as the causes of polypharmacy are complex, so too are the solutions. That is why each AHSN is establishing a polypharmacy community of practice to bring people together to share ideas and best practice and work on local solutions.”

Amy Semple,
Polypharmacy
Programme Manager,
West of England AHSN



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

On behalf of the AHSN Network and commissioned by NHS England, in 2022/23 we have coordinated rollout of the national polypharmacy programme. AHSNs have set up 34 clinical, multi-stakeholder communities of practice, supporting local systems and primary care to identify patients who take multiple medications and are at potential risk of harm, and to support better conversations about medicines.

1,270 health and care professionals have attended our popular webinar series for support in using data from the NHSBSA Polypharmacy Prescribing Comparators to understand risks and identify and prioritise patients for shared decision-making structured medication reviews. Regional and national polypharmacy action learning sets are upskilling the primary care workforce to be more confident about stopping unnecessary medicines.

We are also working with patients and the public to drive regional testing and evaluation of initiatives to change public perceptions of prescriptions, encouraging patients to be open about their medicine concerns and expectations. In partnership with AGE UK and other local voluntary groups, 142 patients have taken part in focus groups to test public-facing materials.

www.weahsn.net/polypharmacy

Early intervention for eating disorders

All AHSNs are supporting the spread and adoption of FREED (First-episode Rapid Early intervention for Eating Disorders). Developed by a team of researchers at South London and Maudsley NHS Foundation Trust and King's College London, this is an evidence-based, specialist care package for 16 to 25-year-olds with a first-episode eating disorder of less than three years in duration.

We have continued to work with Avon and Wiltshire Partnership Mental Health NHS Trust and Gloucestershire Health and Care Services NHS Foundation Trust to introduce the FREED model and support the recruitment of FREED Champions.

www.weahsn.net/freed



Blood pressure optimisation

The ambition of the national AHSN Network Blood Pressure Optimisation programme is to prevent heart attacks, strokes and vascular dementia in patients with hypertension.

As part of this we have been supporting primary care networks in Bristol, North Somerset and South Gloucestershire and Bath and North East Somerset, Swindon and Wiltshire to implement a care framework for hypertension, developed by UCLPartners.

The framework aims to optimise clinical care and self-management, ensuring a system-wide approach to blood pressure optimisation.

We have worked with primary care colleagues to increase the detection of people with hypertension using various approaches, such as practice case finding through patient record searches and involvement of community pharmacists. We are also supporting integrated care boards to reduce health inequalities by targeting 20% of the most deprived populations and other local priority groups by applying NHS England's Core20PLUS5 framework.

www.weahsn.net/bpo

“Prioritising a co-production approach has provided valuable learning for local health services in how we support patients. This learning extends beyond blood pressure management to health care in general and has allowed us to maintain a community focus.”

Elizabeth Emsley,
Clinical Teaching Fellow
& Project Lead on behalf
of Bristol Inner City
Primary Care Network



Encouraging uptake of transformative diagnostics and medicines

As part of the national AHSN Network's support to the Accelerated Access Collaborative (AAC), we are driving the adoption and spread of transformative diagnostics and medicines through the Rapid Uptake Products programme.

FeNO testing in primary care

FeNO devices measure fractional exhaled nitric oxide in the breath of patients, which provides an indication of the level of inflammation in the lungs. This can be used to aid in the diagnosis of asthma and can be carried out by any healthcare professional who has received training. FeNO testing speeds up diagnosis, improves patient experience and reduces secondary care referrals and inappropriate prescribing.

We have supported several local projects as part of the Rapid Uptake Product programme to introduce FeNO testing into primary care, which completed in summer 2022. This has led to a high uptake of FeNO testing across our region.

More than 2,500 patients in the West of England have accessed FeNO testing since October 2021, with 143 GP practices now offering the service.

www.weahsn.net/feno-testing-primary-care

“Having previously offered FeNO testing following referral and seen the improvements in accurate diagnosis, patient education and confidence in self-management, we are now able to offer the test without the delays associated with referral, close to the patient in their GP practice with competent healthcare professionals in a way that is sustainable in the longer term.”

Carol Stonham,
Senior Nurse Practitioner
– Respiratory, Gloucestershire
Integrated Care Board



Asthma biologics for treating severe asthma

As part of the Rapid Uptake Products programme, people with severe asthma are being offered a newer type of treatment alongside their usual asthma medicines, known as asthma biologics.

Biological therapies can transform the lives of people with asthma by reducing the long-term side effects of other treatments, such as oral steroids, and can also reduce exacerbations and life-threatening attacks.

We have worked with the South West Severe Asthma Network, South West AHSN and acute trusts from Cornwall to Swindon to create a common pathway for managing adult asthma care, streamlining the process of referral to severe asthma centres and improving access to asthma biologic therapy.

By the end of the project in September 2022, 961 patients across the South of England were receiving biologic treatment.

We've also worked with Bristol Royal Hospital for Children to develop and embed a robust clinical asthma service for children and young people, including a community pilot involving specialist nursing support from the hospital and six GP practices.

www.weahsn.net/asthma-biologics

"The project has facilitated real improvements in access to and delivery of care for patients with severe asthma across the region and, moreover, has truly helped to galvanise our network into a 'team of teams', spawning many ongoing initiatives that will doubtless deliver further benefits in time."

*Dr Robert Stone,
Consultant Respiratory
Physician and Clinical Lead,
South West Severe
Asthma Network*



Lipid management

Helping prevent cardiovascular disease (CVD) due to high cholesterol, we have supported the increased use of lipid management medicines. This forms part of the Rapid Uptake Products programme, which focuses on three medicines: high intensity statins, ezetimibe and PCSK9 inhibitors. These are usually prescribed in primary care.

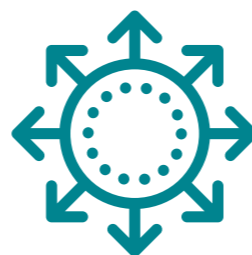
We worked with five GP practices across Gloucestershire to identify patients at risk of raised cholesterol who would benefit from a detailed medication review. Between July 2021 and June 2022 635 patient records were reviewed. 516 patients attended a lipids consultation, resulting in changes to treatment plans for 374 of these. Overall 269 patients achieved a measured reduction in cholesterol. The AHSNs are also leading the AAC's rollout

of Inclisiran, a new drug to lower cholesterol, made accessible to patients through the first NHS 'population health agreement'.

Since October 2021, we've been running a programme of monthly online educational webinars for GPs and healthcare professionals on Inclisiran and lipids optimisation, which has proven incredibly popular. These cover the evidence base and safety data for Inclisiran and practical issues around prescribing and administration. We've also arranged educational events for specific primary care networks (PCNs).

Uptake for Inclisiran in the West of England is now way ahead of the rest of the country. 100% of PCNs in the West have ordered Inclisiran, with over 50% of practices prescribing it to patients to date.

www.weahsn.net/lipid-management



About the West of England AHSN

About the West of England AHSN

The West of England Academic Health Science Network (AHSN) brings together all the key players innovating health and care in our region.

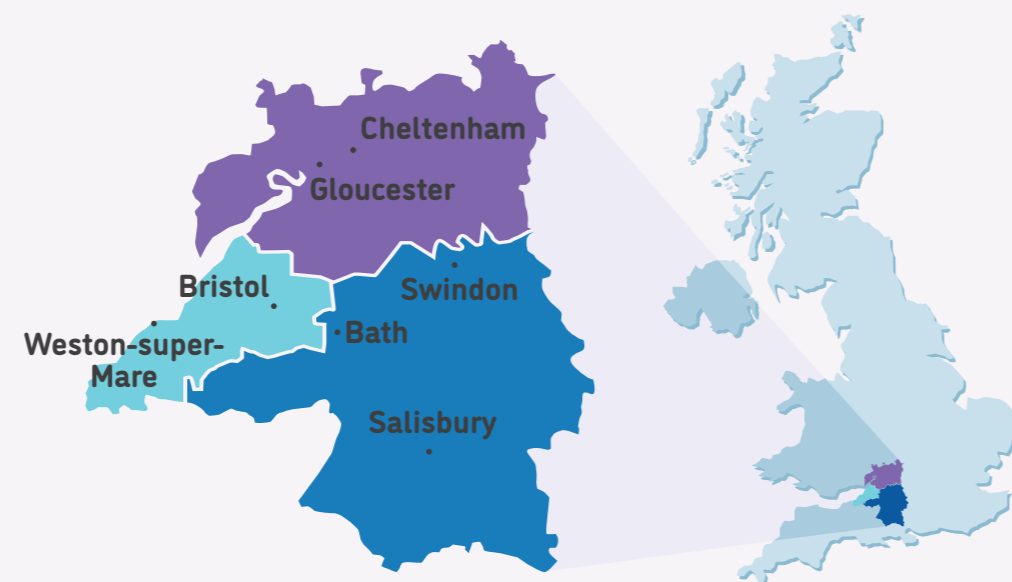
We are one of 15 AHSNs across the country, established by NHS England in 2013. Together we make up the AHSN Network.

Here in the West of England, our AHSN has earned a reputation for its ambitious, joined-up vision for healthcare innovation and transformation.

Since our launch, our priority has been to work across organisational and geographical boundaries, involving our entire network in both development and delivery to drive transformation that is based on genuine need, successfully embedded and sustainable.

West of England AHSN and our Integrated Care Systems (ICS)

- One Gloucestershire
- BSW Together (Bath & North East Somerset, Swindon and Wiltshire)
- Healthier Together Partnership (Bristol, North Somerset and South Gloucestershire)



Our network

The West of England AHSN brings together the health service community, industry, higher education, research bodies, patients and the wider public to work in partnership.

Our member organisations are:

NHS providers

- Avon & Wiltshire Partnership Mental Health NHS Trust
- Gloucestershire Health and Care Services NHS Foundation Trust
- Gloucestershire Hospitals NHS Foundation Trust
- Great Western Hospitals NHS Foundation Trust
- North Bristol NHS Trust
- Royal United Hospitals Bath NHS Foundation Trust
- Sirona Care & Health
- South Western Ambulance Service NHS Foundation Trust
- University Hospitals Bristol and Weston NHS Foundation Trust
- Wiltshire Health & Care

Integrated care boards

- NHS Bath and North East Somerset, Swindon and Wiltshire ICB
- NHS Bristol, North Somerset and South Gloucestershire ICB
- NHS Gloucestershire ICB

Universities

- University of Bath
- University of Bristol
- University of the West of England

Get in touch and find out more

If you're interested in finding out more about how the West of England AHSN might support you or how you can get involved in our work programmes, we'd love to hear from you.

Innovation support

To talk to our Innovation team about support for developing healthcare innovations, email weahsn.innovation@nhs.net or visit www.innovationexchange.co.uk.

West of England Academy

To find out about the learning events and training resources available through our Academy, email weahsn.academy@nhs.net or visit www.weahsn.net/west-of-england-academy.

Patient safety and service transformation

To find out more about the work of our Patient Safety Collaborative and other aspects of our support for service and system transformation, and how to get involved, email weahsn.transformation@nhs.net or visit www.weahsn.net/improving-patient-safety.

General enquiries

To find out about anything else, drop us a line at weahsn.contactus@nhs.net, explore www.weahsn.net or sign up for our regular email newsletters at www.weahsn.net/newsletter-sign-up.



Our Integrating Innovation conference at Aerospace Bristol in March 2023



West of England
Academic Health
Science Network



Integrating innovation

The art of the possible
in health and care



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Office for Life Sciences

