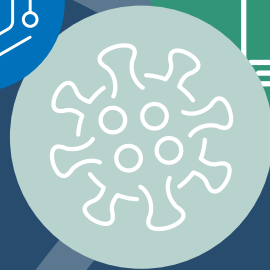


*The***AHSN***Network*

Impact Report
20-21



Foreword

In March 2020, the health and care system embarked on the most challenging year in its history.

Within a matter of days, all [15 Academic Health Science Networks \(AHSNs\)](#) realigned resources to support the national and regional response to coronavirus (COVID-19). We adapted and channelled our efforts to support the system where the need was the greatest, and used our model of operating as a locally connected, co-ordinated national network to add value at pace and scale during this time.

We quickly refocused our existing work maximising on areas that would provide significant benefits, such as sharing our knowledge of proven technologies and expertise in co-ordinated national spread initiatives.

We also supported new priorities, taking on new programmes of work including a leading role in embedding online consultations in primary care practices; supporting the uptake of remote monitoring and oximetry approaches; dissemination of resources for intensive care units; and supporting the uptake of electronic repeat dispensing to support the primary care workforce.

Over the last year, the health and care system has pulled together and for the AHSN Network, it has been a period where we have worked more closely with partners to collaborate and co-ordinate our efforts. This includes, but isn't limited to, our work with NHSX, NHS Confederation and the Health Foundation working on the Reset campaign and the Collaborative NIHR ARC/AHSN partnership (formerly the 'Beneficial Changes Network'), working together to shortlist and sustain the highest impact technologies used during the pandemic.

This report demonstrates that as a Network we drive forward results in the most relevant areas to make a real difference for patients and service users, as well as healthcare professionals, innovators and NHS organisations. We use our unique position working across all sectors relevant to health and care and our embedded relationships as a catalyst for the greatest impacts, and this year is a demonstration of how effective that can be.

This report covers our work from April 2020 to the end of March 2021, highlighting our support for the health and care system and industry during the pandemic. I'd like to thank Piers Ricketts, Chief Executive of Eastern AHSN and AHSN Network Chair over the period covered by this report, for his leadership and direction.

Even in the face of adversity, the system has made some incredible steps forward to adopt innovation and work even more closely with industry. As a Network, we look forward to supporting the system to embed this progress. You can see some of our plans at the end of this report on [page 26](#).



Professor Gary Ford

Chair of the AHSN Network and
Chief Executive of Oxford AHSN

In this report

This report is organised to reflect our national priorities as a Network, which you can see below and overleaf.

You can see a snapshot of our impacts from April 2020 to the end of March 2021 on [page 5](#) and information about some priority themes throughout our work on [page 22](#). At the end of the report, we give an insight into our plans to build on our work this year.



The AHSN Network response to COVID-19

In March 2020, the AHSN Network quickly realigned activities and resource to support the health and care system's response to coronavirus. We will continue to work with partners and the system to embed learnings from this period.



National adoption and spread programmes

Commissioned by NHS England and NHS Improvement, the AHSNs delivered seven programmes, developed regionally and selected for national adoption and spread during 2018-20. Since moving on to new programmes of national focus, AHSNs have continued work to ensure partners are equipped to sustain these programmes where they are a priority for regional health and care systems.

In 20-21, we launched our new national adoption and spread programmes focusing on major NHS priorities around mental health and cardiovascular disease. Even within this challenging year, these initiatives have added value and delivered impact for the health and care system on a national scale.



Improving safety

AHSNs host the 15 Patient Safety Collaboratives (PSCs) across England. Commissioned by NHS England and NHS Improvement, the PSCs are vital delivery agents of the national patient safety improvement programmes.

The PSCs realigned resources at the start of the pandemic to support the system to respond in the most critical areas for patient safety.



Supporting innovators and driving economic growth

Funded by the Government's Office for Life Sciences (OLS), our Innovation Exchange is a co-ordinated approach to identify and spread innovations that directly respond to NHS needs, and have the potential to transform the lives of patients. The Innovation Exchange activity supports companies at every stage of their development to encourage economic growth on a regional and national scale.

The AHSN Network also leads and collaborates on other initiatives to support innovators and their journey through the health and care system, see [page 16](#) to find out more.



Fast-tracking roll-out of latest technologies

The AHSN Network is a key member of the Accelerated Access Collaborative (AAC), an NHS England and NHS Improvement initiative to remove barriers and accelerate the introduction of groundbreaking new treatments and diagnostics to transform care. We support NHS adoption of transformative technologies and medicines through the AAC's Rapid Uptake Products (RUP) programmes and MedTech Funding Mandate (MTFM), and until April 2021 through the Innovation and Technology Payment (ITP) programme.

AHSN Network national impacts 20-21



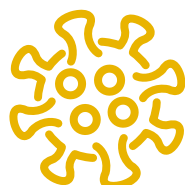
92%

of trusts implementing all 3 interventions of our tracheostomy programme



100%

of CCGs in England had launched the national COVID Oximetry @home model by December 2020



96%

of acute trusts set up virtual ward pathways by March 2021



250,000+

views of 14 training films for staff working in care homes who care for residents at risk of deterioration



More than

21,000

views of collaborative webinars with the RCGP on coronavirus themes for primary care



More than

170

AHSN staff deployed into the NHS during the height of COVID-19, working on projects directly supporting NHS clinical staff



258,000+

patients benefited from our national adoption and spread programmes



231,000+

patients benefited from our delivery of selected AAC products and programmes



£462m

investment leveraged



700

jobs created and

763

jobs safeguarded



2,339

children received objective ADHD assessments as result of our national Focus ADHD programme



264

16-25-year-olds received specialist care for eating disorders in the first year of our Early Intervention Eating Disorders programme

To find out more about the individual impacts of our national programmes, visit: ahsnnetwork.com/impact-report-20-21

20-21 timeline

of AHSN Network activities to support the coronavirus (COVID-19) response

In March 2020, the AHSNs responded quickly to the immediate crisis of the pandemic, co-ordinating efforts on a national scale. This timeline isn't an exhaustive account, but instead demonstrates the breadth of contribution from AHSNs in support of the pandemic response.



March 2020

- **Response kick off** – Cross-AHSN groups initiate plans to co-ordinate support
- **Top tech** – List of 350+ 'ready to go innovations' drawn up to support local systems
- **Online triage** – Leading role to embed online consultations in primary care practices

April 2020

- **eRD goes national** – We begin national roll-out of electronic repeat dispensing
- **TechForce19** – TechForce19 winners announced – AHSNs reviewed 1,600 applications from providers with digital solutions to support the elderly, vulnerable or isolated
- **Patient safety** – Refocused patient safety work on COVID-19 priorities – critical care, care homes, managing deterioration across the system and supporting maternity systems
- **ICU learning** – First in our series of COVID-19 reports collating ICU learning from around Europe

May 2020

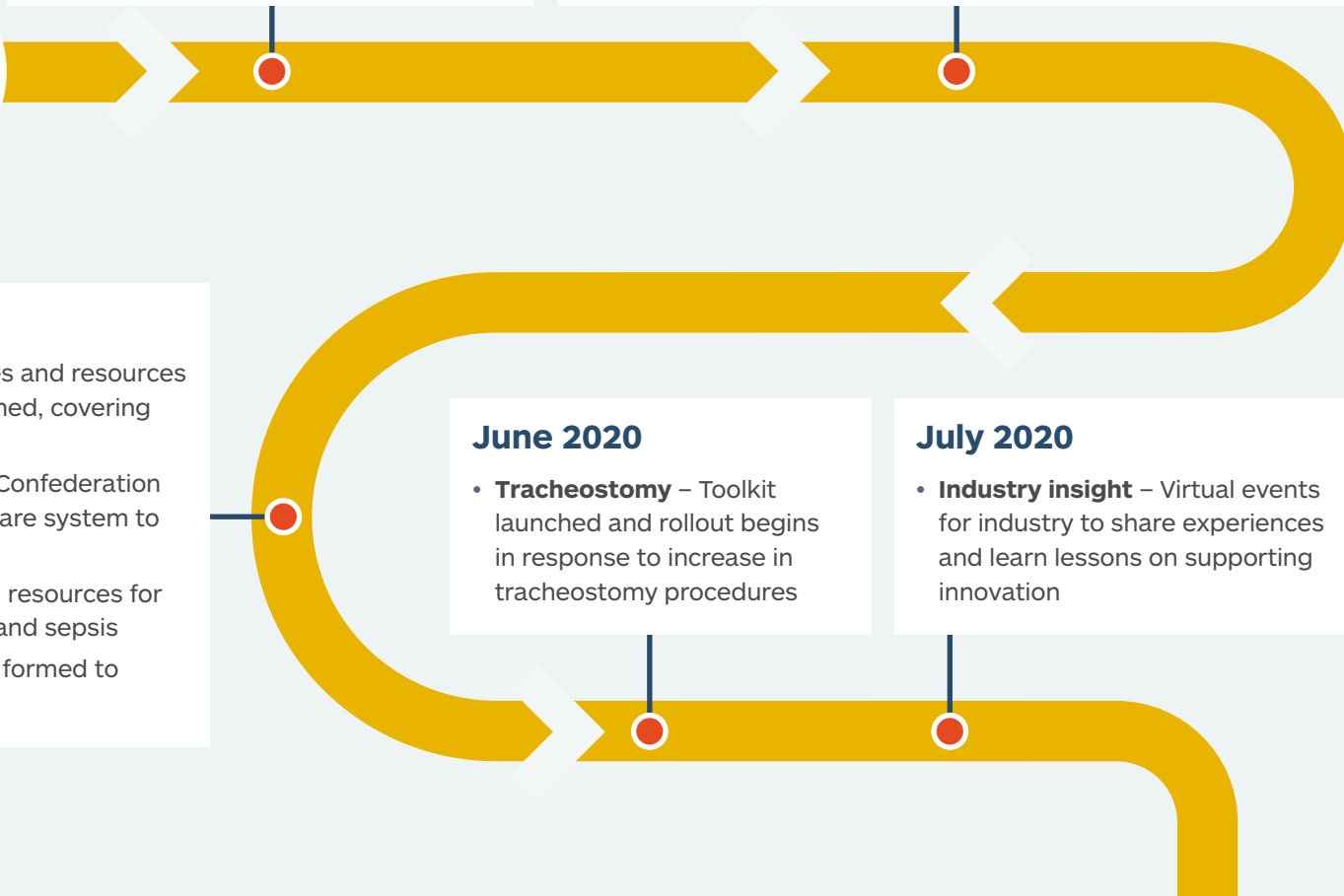
- **Guides and resources** – Latest in a series of guides and resources on adapting services during COVID-19 were published, covering stroke and wound care
- **Reset** – Launched NHS Reset campaign with NHS Confederation and Health Foundation to support the health and care system to shape and adapt
- **Care homes** – Collation and roll-out of training and resources for care homes on spotting the signs of deterioration and sepsis
- **Vulnerable groups** – AHSN community of practice formed to support vulnerable groups at risk of COVID-19

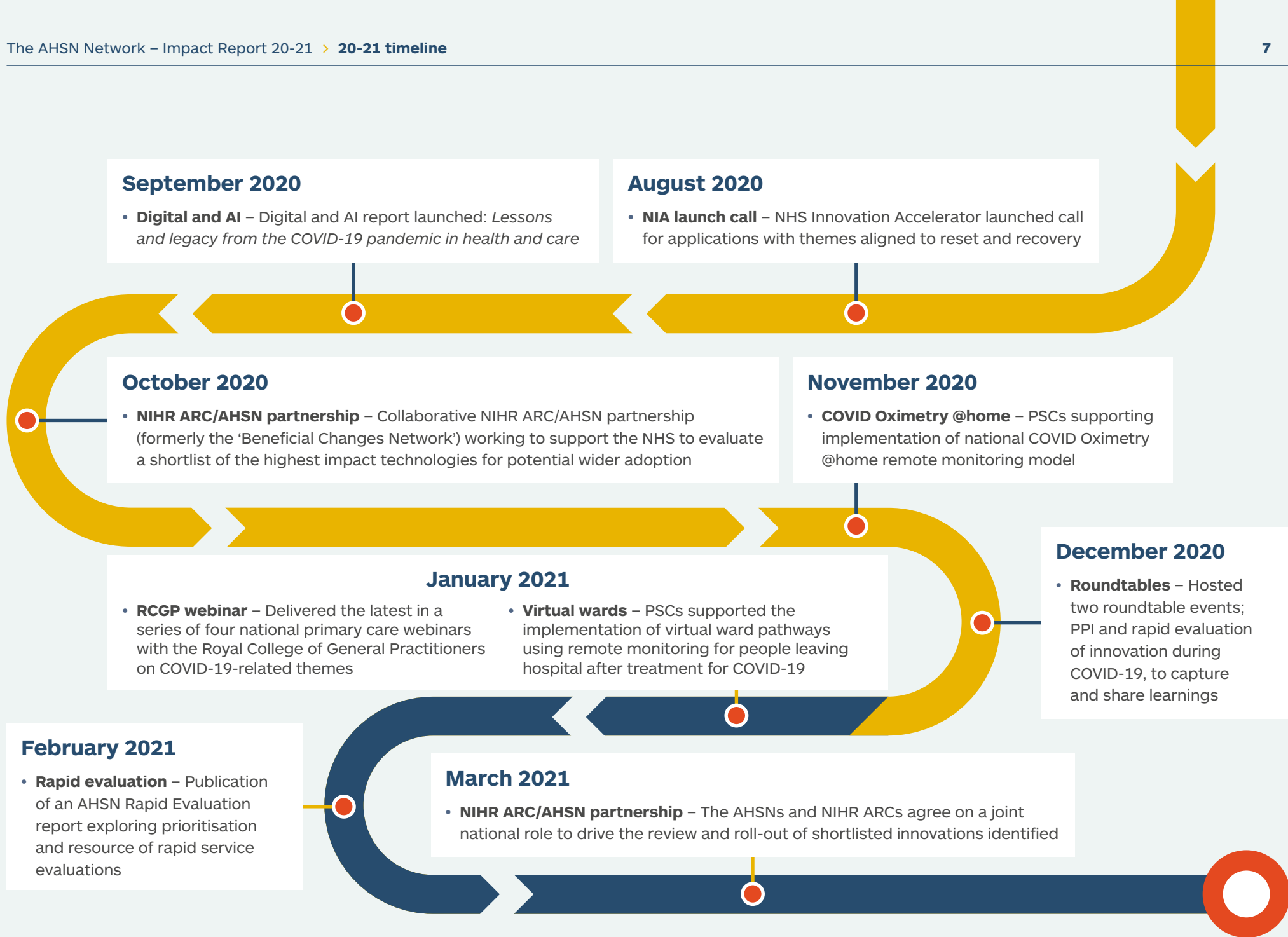
June 2020

- **Tracheostomy** – Toolkit launched and rollout begins in response to increase in tracheostomy procedures

July 2020

- **Industry insight** – Virtual events for industry to share experiences and learn lessons on supporting innovation





Supporting the coronavirus response on a national scale

An impact case study on oximetry

During the first wave of the pandemic, it was identified that low oxygen saturation directly correlates with worsening condition in people with coronavirus, even in people feeling otherwise well. Therefore, it was shown to be a sign of poorer outcomes.

After the initial pandemic wave, our 15 Patient Safety Collaboratives (PSCs) helped trial the use of pulse oximetry to monitor patients at home and detect any decline in condition that might require hospital review and admission. This lifesaving intervention has been linked with reductions in mortality, hospital length of stay, and the number of patients requiring intensive care admission and ventilation.

After supporting eight pilot sites, PSCs helped roll out the national COVID Oximetry @home model, where patients self-monitor oxygen levels at home (including care homes), supported by primary care.

PSCs used their existing networks to help systems rapidly translate this new operating model into practice. They provided regional clinical leadership, and bespoke quality improvement support for implementation.

This was tailored to each system depending on their individual circumstances. They also supported teams through a successful National Learning Network and set up a FutureNHS platform, which was invaluable to collect and share resources, best practice and advice during this fast-paced programme (for example, a COVID Oximetry @home toolkit).

From December 2020, PSCs also supported widespread implementation of a COVID virtual ward pathway, which supports early discharge of patients with coronavirus with a pulse oximeter and oversight from secondary care.

From a starting point of little to no uptake in summer 2020, 100% of CCGs in England had launched the COVID Oximetry @home pathways by the end of December 2020. By the end of March 2021, 96% of acute trusts had set up virtual ward models.



“The AHSNs/PSCs have been absolutely fantastic to work with. They have not just supported rapid scale and spread in record time, they have created invaluable learning networks that have enabled us to continuously improve and update guidance and best practice.”

We aim to continue to build on this agile approach with AHSNs next year and expand out into other @home pathways, which is really exciting.”

Tim Straughan
Director, NHS @home

By December 2020, **100%**
of CCGs in England had launched the
national COVID Oximetry @home model

By end of March 2021, **96%**
of acute trusts had set up
virtual ward models

National adoption and spread programmes

The AHSNs have a dual regional and national focus. We deliver local work programmes based on the needs of our regional systems and collectively drive programmes that tackle national priorities and are expected to have a universal impact at scale.

This report focuses on our national work and impact. To learn more about the activity of individual AHSNs in different parts of the country, visit the individual AHSN websites – [access a list on our website](#).

AHSNs discovering, developing and testing innovations in their area provides a pipeline of innovations for potential adoption and spread in other regions. Our connected network approach enables us to share our learnings and expertise.

In 2020-21, we started to deliver our new national adoption and spread programmes:

- > [Focus ADHD](#)
- > [Early Intervention Eating Disorders](#)
- > [Lipid Management and Familial Hypercholesterolaemia](#)

From 2018-2020 we delivered seven national adoption and spread programmes. We continued to measure and monitor these as we put foundations in place to support the system to self-sustain:

- > Atrial Fibrillation
- > Emergency Laparotomy
- > ESCAPE-pain
- > PINCER
- > [Prevention of Cerebral Palsy in PreTerm Labour \(PReCePT\)](#)
- > Serenity Integrated Mentoring (SIM)
- > [Transfers of Care Around Medicines \(TCAM\)](#).



To find out more about these programmes and the impacts, visit:
ahsnnetwork.com/impact-report-20-21

New national programmes:

Focus ADHD

We are working with mental health trusts and community paediatric services across England to improve the assessment process for Attention Deficit Hyperactivity Disorder (ADHD) for children and young people.

This programme involves working with trusts across England to implement an objective assessment tool, the QbTest, (measuring attention, impulsivity and activity) to supplement current clinical assessment processes. Evidence has shown that the use of objective assessment tools, alongside other clinical information, can provide a more rapid diagnosis – with reductions of around five months.

At times during the pandemic, many ADHD assessments were put on hold. Even with this barrier, AHSNs have made great progress with spread of the Focus ADHD programme. Many trusts use the programme as a way to cut waiting lists, as evidence demonstrates that introducing an objective assessment tool streamlines the process and reduces the number of appointments required for an individual patient. During 20-21, there was an increase from 35 to 46 NHS trusts that had adopted the intervention.

2020-21 Impacts

2,339 objective ADHD tests carried out as a result of the new AHSN Focus ADHD programme

10,000 objective ADHD tests were carried out across all live sites in England



New national programmes:

Early Intervention Eating Disorders

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

One approach we are using is FREED (First episode Rapid Early intervention for Eating Disorders), a model developed by South London and Maudsley NHS Foundation Trust and King's College London. This is an evidence-based, specialist care package for 16-25-year-olds with a first episode eating disorder of less than three years' duration. Broadly based on the early intervention model for psychosis, it overcomes barriers to early treatment and recovery and provides highly co-ordinated early care, with a central focus on reducing the duration of an untreated eating disorder.

The AHSNs started delivering this programme during the pandemic and have still made great progress to support the initiation of the service within mental health trusts across the country – with 264 patients already receiving tailored specialist care.

2020-21 Impacts

264

16-25-year-olds now receiving specialist care for eating disorders

22

mental health trusts operational with the FREED model

Lipid management and familial hypercholesterolaemia

The AHSNs are scoping a national programme of work around cardiovascular disease (CVD) prevention.

The aim of this joint AAC and AHSN Network programme will be to support primary care in the prevention and management of CVD. It will introduce targeted interventions for people with high cholesterol, including identifying and treating people with familial hypercholesterolaemia (FH), with further regional activity focusing on atrial fibrillation (AF) and high blood pressure.

2020-21 has been a scoping year for this programme. We have appointed a programme lead, started engagement with local system partners, and are considering expanding the remit with partners including NHS England and Improvement and NHSX – to maximise the implementation support of the AHSNs.

Impact case studies:

Helping patients who need extra support with prescribed medicines when they leave hospital

When some patients leave hospital they can require extra support taking their prescribed medicines. This may be because their medicines have changed or they need help taking their medicines safely and effectively.

The transfer of care process is associated with an increased risk of adverse effects. 30-70% of patients experience unintentional changes to their treatment or an error is made because of a miscommunication.

We have been addressing this issue through our Transfers of Care Around Medicines (TCAM) programme on a national basis since 2018. When patients discharged from hospital are identified as needing extra support, they are referred through a safe and secure digital platform for advice from their local community pharmacist.

TCAM was identified as a key response programme during the pandemic by many health systems, to prevent avoidable re-admissions based on medication errors, and improve hospital bed capacity at a time when there was significant pressure.

2020-21 Impacts

Increase from
61 to 85
NHS trusts adopted

78,346
patient referrals
completed*

* Estimate of the year end position.

Sustaining TCAM

In February 2021, the NHS Discharge Medicines Service (DMS) was introduced as a national, essential service for community pharmacies in England. TCAM was recognised as supporting DMS by providing the learning around how to set up these services as well as providing a digital platform for trusts to communicate with a patient's usual community pharmacy about changes to their medication when they leave hospital. Through our successful roll out of TCAM, the AHSNs have created a foundation for embedding the national DMS service.



Impact case studies:

Preventing cerebral palsy in preterm babies

Every year around 4,000 women in the UK give birth very early because of complications with their pregnancy.

Being born too early is the leading cause of cerebral palsy (CP), which has a lifelong impact on children and families. Magnesium sulphate (MgSO₄) given during preterm labour reduces the relative risk of CP in very preterm infants by 30% and costs from just £1 a dose.

The Prevention of Cerebral Palsy in PreTerm Labour (PReCePT) programme was delivered on a national basis since 2018, working with all maternity hospitals in England to make MgSO₄ available to mothers who go into labour at less than 30 weeks. It is the first ever perinatal quality improvement (QI) programme delivered at scale across the whole country, bringing together midwives, obstetricians and neonatologists.

The percentage of eligible mothers who received magnesium sulphate was 86.5%, exceeding the target of 85%. From April 2020 to the end of March 2021, an additional 691 mothers received magnesium sulphate – helping to avoid an estimated 18 cases of cerebral palsy.

2020-21 Impacts

Additional
691
mothers received
magnesium
sulphate

An estimated
18
cases of cerebral
palsy avoided

Estimated
£14,400,000
savings in lifetime
health and social
care costs



Sustaining PReCePT

During the pandemic, we issued advice on continuing to deliver the PReCePT programme to maintain this valuable intervention. The unprecedented pressures of the coronavirus pandemic were particularly challenging in maternity and neonatal units due to staff shortages and the difficulties this presented. These issues didn't impact rates of MgSO₄ uptake and since April 2020, national MgSO₄ uptake remained above 86%. This demonstrates how effective the PReCePT QI work undertaken in units has been in embedding the programme and ensuring its sustainability.

More on our work with maternal and neonatal teams

See our work to support more efficient diagnosis of pre-eclampsia on [page 21](#).

Improving safety

England's 15 Patient Safety Collaboratives (PSCs) play an essential role in identifying and spreading safer care initiatives throughout the health and care system, embedding new pathways of care.

PSCs are funded and nationally co-ordinated by NHS England and NHS Improvement, and hosted locally by the AHSNs. They are uniquely placed to work at system-level and with individual organisations, connecting national priorities with local needs.

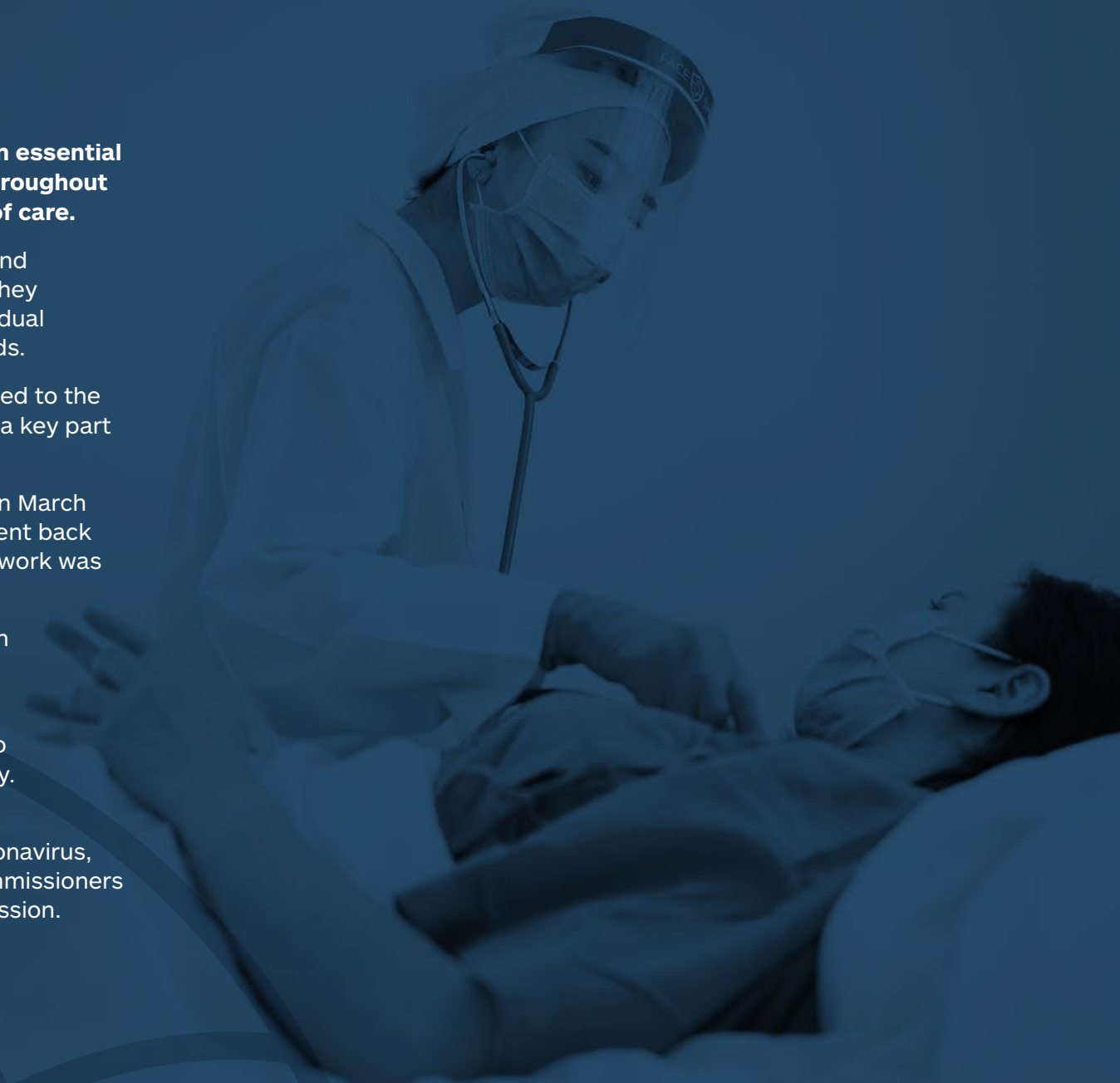
In March 2020, the PSCs were set to deliver initiatives aligned to the National Patient Safety Improvement Programmes (SIPs) – a key part of the NHS Patient Safety Strategy.

However, PSCs responded quickly to the immediate crisis in March 2020 and reprioritised their day-to-day work. Some staff went back to frontline roles or supported national teams, while PSCs' work was rapidly redirected to focus on the following priorities:

- > Identifying and managing people at risk of deterioration as a result of coronavirus and use of early warning and communication tools.
- > Implementing a safer tracheostomy care programme to help hospital staff care for patients with a tracheostomy.

As well as supporting the system with the response to coronavirus, during 20-21 we have worked closely with our national commissioners and partners to plan for the roll-out of our new PSC commission.

To find out more, visit: ahsnnetwork/patient-safety



Impact case studies:

Identifying and managing people at risk of deterioration

Our work to support the identification and management of people at risk of deterioration focused on two areas: supporting spread of the national COVID Oximetry @home model (see [page 8](#) for more information) and supporting care home staff to recognise and escalate deterioration in residents.

At the beginning of the pandemic, care homes were quickly established as an area of risk for patient safety. In recognition of this, PSCs quickly aligned to support care home professionals to identify and manage deterioration, including the 'soft signs', through the use of tools like RESTORE2 and RESTORE2mini.

The AHSNs provided guidance and bespoke resources, including a series of training films, which received more than 250,000 views.

2020-21 Impacts

250,000+

views of 14 training films for staff working in care homes who care for residents at risk of deterioration

99.3%

of all acute and ambulance trusts use the National Early Warning Score (NEWS2)

Deterioration management tools RESTORE2 and RESTORE2mini are being used in

12 out of the 15 PSC areas

Supporting safer tracheostomy care

The number of patients requiring relatively prolonged ventilatory support in intensive care due to coronavirus led to increased numbers of patients requiring tracheostomies, which are used to help wean some patients from respiratory support.

We published, in collaboration with the National Tracheostomy Safety Project (NTSP), and the National Patient Safety Improvement Programmes, a toolkit for healthcare staff to support them to safely care for patients with tracheostomies.

In a five-month period, PSCs helped increase the percentage of trusts implementing all three of the project's key interventions from 71% to 92%. [A long-term study](#) showed that following the programme reduces serious incidents by 55%, which will have had an immediate and positive impact for patients.

2020-21 Impacts

92%

of trusts implementing all three key interventions of our tracheostomy programme



Supporting innovators and driving economic growth

Our 15 regional teams work closely with businesses and individual innovators to help realise the potential of their ideas.

We advise on whether there is an identified need within the NHS for this solution, help assess the commercial viability and economic potential, and support innovators to quantify and gather evidence of the impact that the innovation could have on the health and care system.

The unique role of the AHSNs means we bridge the gap between the NHS and industry, bringing the very best innovative solutions to the NHS and helping to create economic growth by harnessing the NHS investment. Our commission from the Government's Office for Life Sciences (OLS) enables us to do this in a structured and methodical way, answering the needs of the health and care system and of innovators with ideas that match system challenges.

2020-21: AHSN Network industry and economic growth impacts



2,888

companies supported



4,825

interactions with companies



124

companies created long-term strategic partnerships



700

jobs created



763

jobs safeguarded



£462m

investment leveraged

Innovation Exchange

The Innovation Exchange is the way in which the AHSNs link the most appropriate innovations to priority health and care challenges. As part of the Innovation Exchange activity, we co-ordinate idea and information sharing, and where relevant we also run local and national events to explore challenges and match these with potential solutions.

The Innovation Exchange builds on AHSNs' unique cross-sector connections, which enable us to identify common challenges and quickly bring people and organisations together to develop, test and spread solutions.

The Innovation Exchange has four structured elements:

1. Defining health system needs
2. Providing innovator support and signposting
3. Real-world validation
4. Spread and adoption of supported innovations.

Innovation Exchange activity is delivered on a regional basis by AHSNs who have in-depth and embedded connections and understanding of priorities within their local system. Nationally, the Network facilitates Innovation Exchange where themes are of national importance and interest.

2020-21 Impacts

1,900

listens to our series of Innovation Exchange podcasts aimed at industry innovators

National Innovation Exchange digital gateway attracted

14,000

visitors

Pulmonary Rehabilitation Innovation Exchange

We co-ordinated an Innovation Exchange event in December 2020, bringing together hundreds of pulmonary rehabilitation practitioners who tuned in to hear experts, innovators and fellow practitioners discuss the increased challenges facing pulmonary medicine during the coronavirus pandemic. Attendees were presented with real-world examples from those who had been implementing new ways to reach pulmonary rehabilitation patients during the disruption of face-to-face services.

The AHSNs were able to determine a clear demand for innovation in this field and provide a platform for innovators and practitioners to share knowledge and ideas. The event recording has been viewed over 450 times by professionals across the country.

Many AHSNs have been working closely with their local health and care systems to increase support for respiratory teams and their patients. The AHSN Network has also been supporting the NHSX Innovation Collaborative to scale up remote monitoring and solutions. This work enables clinicians to deliver care for rehabilitation, including monitoring and supporting patients with respiratory conditions remotely.



Bridging the Gap

Bridging the Gap is a long-running series of events delivered by the AHSN Network for healthcare industry innovators. In March 2021, more than 300 delegates joined the latest in this series – attending online plenary and workshop sessions over two days. The event included strategic updates and sessions designed to help innovators navigate the NHS, including information about the expertise and guidance on offer from the AHSN Network and its partners.

There were also specialised workshops in which a series of expert panels and speakers considered some of the key challenges and how these can be overcome when seeking to work with or engage the NHS. As well as supporting innovators through what they learn by attending, this is also a route for innovators to connect with regional AHSNs forming relationships for future structured support.



NHS Innovation Accelerator

The NHS Innovation Accelerator (NIA) supports faster uptake and spread of impactful innovations already in use across England's NHS, benefiting patients, populations and NHS staff. An NHS England initiative delivered in partnership with the AHSNs, this national accelerator has a unique dual focus on personal development for individuals ('Fellows') and bespoke support to spread their innovation.

In 20-21, the NIA recruited 12 new Fellows with promising innovations that specifically address key NHS priorities, which include supporting the workforce, mental health and coronavirus response. Find out about the selected innovations on the NIA website: nhsaccelerator.com

Small Business Research Initiative (SBRI) Healthcare

SBRI Healthcare is an NHS England and NHS Improvement initiative, supported by the AHSNs and managed by LGC Group. The AHSNs support SBRI Healthcare by advising on and promoting funding competitions designed to attract innovations that respond to defined needs of the health and care sector.

During 20-21, the AHSNs played a pivotal role in engaging the industry to apply for SBRI Healthcare funding, with competition themes including urgent and emergency care, cardiovascular disease, and integrated and social care.

Find out more at sbrihealthcare.co.uk

Fast-tracking roll-out of latest technologies

The AHSN Network is a key member of the Accelerated Access Collaborative (AAC), which is an NHS England and NHS Improvement initiative to bring together industry, government, regulators, patients and the NHS to remove barriers and accelerate the introduction of groundbreaking new treatments and diagnostics which can transform care. The AAC supports all types of innovations: medicines, diagnostics, devices, digital products, pathway changes and new workforce models.

Supported products

In 20-21, we supported the spread and adoption of products and programmes that formed part of the Innovation and Technology Payment (ITP) and the AAC's Rapid Uptake Products (RUPs). The ITP closed at the end of March 2021, replaced by the new MedTech Funding Mandate.

Products that the AHSNs supported in 20-21 that were part of ITP, which closed in March 2021:

- > SpaceOAR
- > Non-Injectable Arterial Connector
- > Plus Sutures
- > Endocuff Vision.

Products supported in 20-21

MedTech Funding Mandate

- **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.
- **HeartFlow 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.
- **gammaCore** – Non-invasive vagus nerve stimulation therapy for treatment of cluster migraines.
- **SecurAcath** – Device to secure catheters for patients with a peripherally inserted central catheter.

RUPs

- **Cladribine** – An oral treatment for treating highly active relapsing-remitting multiple sclerosis in adults.
- **Lipid Management clinical pathway** – The RUP for lipid management is a novel, NICE-endorsed clinical pathway. This innovation aims to improve a person's lipid profile, by reducing cholesterol concentration in blood by treating patients with the right medicine along the evidence-based pathway. The pathway includes three medicines: high intensity statins (HIST), ezetimibe, and PCSK9 inhibitors. Bempedoic acid and inclisiran will be added to the pathway later in 2021.
- **Measuring fractional exhaled nitric oxide (FeNO) concentration in asthma: products NIOX VERO and NObreath** – FeNO (fractional exhaled nitric oxide) is a point of care test to measure type two inflammation in airways, which augments and supports the accuracy of asthma diagnosis. This innovation aims to improve patient care and outcomes through more effective diagnosis of patients suspected of having asthma.

- **Biologics for treating severe asthma: Reslizumab, Benralizumab, Mepolizumab and Omalizumab** – Biological therapies can transform patient lives by reducing long-term side effects of other treatments and can also reduce the number of exacerbations and life-threatening asthma attacks. This innovation aims to improve patient care and outcomes by providing a better treatment option for patients with severe asthma.
- **Tamoxifen for prevention of breast cancer for people at known risk** – For people at known risk, Tamoxifen can halve the risk of breast cancer when taken over five years. However, uptake of Tamoxifen is low in clinical practice for several reasons. This innovation aims to improve patient care and outcomes.



There is more information about the specific uptake of these products, driven by the AHSNs, [on our website](#).

Impact case studies:

Accelerating the uptake of placental growth factor (PIGF) tests

The placental growth factor (PIGF) blood test was developed to help in the diagnosis of pre-eclampsia. Offering the test to women suspected of having pre-eclampsia means clinical teams are better able to identify women most at risk and can subsequently offer the most appropriate care.

PIGF was an ITP product and is now part of the MedTech Funding Mandate. In 2020-21, all AHSNs worked with maternity services in their region to encourage the adoption of the test. Even during the pandemic, AHSNs were able to support an increase in adoption of the test, which by the end of March 2021 had spread to an additional 47 maternity units since April 2020.

2020-21 Impacts

Spread from
57 to 104
maternity units

40,950
PIGF tests performed
to rule out pre-eclampsia

More on our work with maternal and neonatal teams

See our work to support the prevention of cerebral palsy in preterm labour on [page 13](#).

Providing benefit for adults with highly active relapsing remitting MS with Cladribine

Cladribine is an innovative treatment for adults with highly active relapsing remitting multiple sclerosis (MS), a condition that can affect the brain and spinal cord, leading to a range of symptoms, including problems with vision, limb movement, sensation, balance and cognition. The condition most frequently begins with relapsing neurological symptoms though can also lead to progressive and more persistent disability in some people. In some cases, this lifelong condition can cause serious disability. Cladribine is an oral treatment given as two treatment courses, one year apart.

Since the AHSNs involvement in the spread of this intervention in April 2020, over 1,500 patients have benefited from the treatment across England. Even though there was a slower uptake of interventions relating to immune suppressant therapies during coronavirus, the AHSNs achieved 119% of the annual trajectory.

2020-21 Impacts

1,501
patients have benefited

119%
of annual trajectory
achieved

Underpinning themes

Several underpinning themes can be seen throughout our work programmes and priorities. As a Network, we are committed to developing and supporting best practice approaches in these areas.

- > [Diversity, inclusion and equality](#)
- > [Patient and public involvement and co-production](#)
- > [Digital and artificial intelligence](#)
- > [International](#)
- > [Workforce](#)
- > [Sustainability and the environment](#)
- > [Patient safety](#)

Diversity, inclusion and equality

We are committed to increasing diversity in health and care innovation. Supporting diversity allows the innovation landscape and NHS to better reflect the communities we serve and in turn, enabling diversity and inclusion are imperative to understanding and addressing health inequalities.

As a Network, we have committed to a set of diversity pledges to hold ourselves to account for the way we identify and nurture innovations, and the innovators behind them. They ensure we consider all members of our communities when establishing new approaches.



In 2020-21, we have...

...formed a partnership with the LGBT Foundation to launch a nationwide call for innovations that address health inequalities facing the LGBT+ community.





Patient and public involvement and co-production

It's essential that we design and spread innovation that transforms healthcare in partnership with patients, public, carers, and communities. This has always been high on our agenda and we have further plans to bring diverse perspectives together and listen to people's experiences and insights.



In 2020-21, we have...

...developed an involvement and co-production strategy for 2021-23, which will be published later this year.

Digital and artificial intelligence

Digital and artificial intelligence (AI) solutions can be used to make services more accessible, make it easier for people to self-manage their health conditions, help people connect and collaborate across organisational barriers, encourage physical activity, and so much more. The AHSNs have a wealth of 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 2020-21, we have...

...been supporting health and care partners to introduce and make the most of digital and AI technologies as part of the coronavirus response. In September 2020 we released a report to share our learnings on a wide scale. We also contributed to the development of testing (real-world evaluation in the NHS) and regulating AI.



International

Great health and care innovation isn't limited by geography. We have seen some great successes from our international connections, whether that is by importing innovations proven in other countries; sharing and exchanging our learnings with colleagues from across the world; or working with international companies interested in collaborating with the NHS. We aim to build even more on our work, experience and collective expertise in this area.



In 2020-21, we have...

...started a cross-AHSN community of practice formed of representatives working internationally, to facilitate even greater collaboration in this area across AHSNs and with our partners in health and Government.



Workforce

The health and care workforce is the backbone of the system. Across our Network, we recognise the great impact that supporting efficiencies, and training the workforce of the future can have.



In 2020-21, we have...

...started work on a national workforce programme, with proven innovations that will be delivered as a priority by all AHSNs reflecting the needs and priorities of their NHS regions.



Sustainability and the environment

In acknowledgement of its impact on the environment, the NHS has committed to becoming carbon net-zero by 2030 and to making other changes to become more sustainable. We are committed to supporting more sustainable and environmentally conscious healthcare and look to use expertise in innovation to support the system to respond and adapt to this challenge.



In **2020-21**, we have...

...formed a cross-AHSN community of interest and started to chart the impacts our existing programmes have on the environment, as well as outlining a strategy to formalise this work.

Patient safety

Our commitment to patient safety isn't just embodied through our Patient Safety Collaboratives, but is an essential element throughout all of our work.



In **2020-21**, we have...

...continued to protect and improve the safety of patients through our national coronavirus response and have supported the health and care system with plans to sustain these programmes to maximise the long-term impacts.



The year ahead

The AHSNs have truly demonstrated the impact we can have by operating as a connected national network. Although this year has been extremely challenging, there have been a number of positives that the health and care system can take from this experience. This includes an increased appetite and recognition for innovation; removal of barriers to change; and a move towards a more integrated system.

Over the next year, we will continue to deliver against our national priorities. We will work to further embed our current national programmes and finalise our evolving cross-AHSN approach to managing our pipeline of innovations as we develop a new universal model – helping us to identify and select our next high-impact national adoption and spread programmes.

We will also work to provide a more unified offer for innovators, including supporting the roll out of the AAC Innovation Service, which aims to help innovators identify where they are on their journey and signpost them through the next stages.

We will continue working closely with our partners including NICE, NIHR, ABPI and ABHI. An example of these strong partnerships and collaborations is our confirmed work over the next year with NIHR ARCs to drive the roll-out of innovations identified as having a high-impact during the pandemic.

Patient Safety Collaboratives will be focusing again on delivering the five national Safety Improvement Programmes (SIPs) over the coming year. This includes maternity and neonatal safety, managing deterioration, mental health, medicines safety, and the adoption and spread of evidence-based safety care bundles.

In 2021, we will introduce a new strategy for the AHSN Network. One of my priorities as Chair will be to support the implementation of that strategy, and a review of the governance arrangements needed to support our strategic ambitions for this and the next licence period from 2023 onwards.

Working together as a collective, I am confident we can achieve these goals and support the health and care system and innovation landscape to recover, strengthen and enter its most innovative period.



Professor Gary Ford

Chair of the AHSN Network and
Chief Executive of Oxford AHSN

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