Impact report 2018-20

England’s 15 Academic Health Science Networks (AHSNs) deliver national programmes for:

- NHS England
- NHS Improvement
- The Office for Life Sciences.

This report provides a summary of our collective impact over the last two years from April 2018 to March 2020, and highlights how we refocused our activity towards the end of this period to support the health and care system in its response to the COVID-19 pandemic.
The pace at which health and care has had to change and adapt in the last few months has been unprecedented.

We have seen the NHS respond rapidly to the challenges posed by the COVID-19 pandemic, changing in ways and at a rate never seen before. That is testament to the commitment and willingness of patients, and health and social care professionals to adapt and embrace new ways of working. Collaboration across the health and social system building on existing partnerships has been crucial to sustaining key NHS services and new approaches.

While the purpose of this impact report for 2018-2020 is to reflect on the AHSN Network’s collective achievements and progress through to March 2020, we cannot do this without using it as an opportunity to consider how our work and areas of expertise align with the new, global context of the coronavirus pandemic.

The AHSNs’ response to COVID-19 has highlighted how our core strengths and ways of working have proved a valued asset to our partners. AHSNs are agile and well connected organisations, and we were able to mobilise and respond to this new crisis almost overnight, providing additional support and brokering relationships across health and care, research and academia, industry and the voluntary sectors.

These connections and approaches have been established largely as a result of the activity you’ll read about in the following pages of this report.

Through our national commissions – our adoption and spread programmes, coordination of the 15 Patient Safety Collaboratives and our support for innovators and industry - in addition to each AHSN’s regional activity responding to the needs of our Sustainable Transformation Partnerships (STPs) and Integrated Care Systems (ICSs), AHSNs are now firmly embedded in health and care ecosystems at both a regional and national level.

The research and innovation priorities of workforce, use of digital and AI technology, mental health and multi-morbidity that emerged from our NHS needs survey last year have likewise proven to be highly relevant in responding to the pandemic.

As this report demonstrates, as an AHSN Network we are achieving results that make a real difference for patients and service users, as well as healthcare professionals, innovators and NHS organisations. These strong foundations make us ideally placed to help all those involved in improving and innovating health and care to tackle together the challenges that lie ahead.

Through our national collaboration and the individual work in our local AHSN areas, we have built seven years’ knowledge, experience and expertise of driving the adoption and spread of new technologies.

Whilst we are proud of the impacts within this report, the adoption of innovation remains a challenging exercise in such a large health and care system, with as many barriers to navigate as there are enablers.

This impact report covers the two year timeframe for adoption of our first set of national priority programmes, and alongside the report we are drawing together a summary of our learning and experiences and will be sharing this in 2021.

Piers Ricketts
Chair of the AHSN Network and Chief Executive of Eastern AHSN
AHSN Network national impacts
by the end of the 2019-20 financial year

479,000+ patients benefiting from our two-year national adoption and spread programmes

13,387 fewer patients now at risk from clinically significant medication errors as a result of PINCER

Our atrial fibrillation work has helped prevent 11,734 strokes and saved 2,933 lives

At least 96% of acute trusts have now adopted the Emergency Laparotomy pathway

535 people have benefited from our SIM programme, exceeding our target by 14%

553,290 ITP units/scans supplied for patients in the last three years

99% of all acute and ambulance trusts use NEWS2

42% of all acute trusts have implemented Transfer of Care Around Medicines

8,472 people with chronic joint pain have participated in ESCAPE-pain courses

As a result of PReCePT 1,106 additional mothers received MgSO4 in 2018-20

11,600+ interactions with companies since 2018

£322 million+ investment leveraged by companies supported by AHSNs

4,000+ companies supported since 2018

76% of trusts adopted the ED safety checklist
Our NHS should represent and reflect the communities we serve. This does not just apply to our frontline workforce. The way that we develop and adopt innovation and technology must also be based around our core mission to serve all our population, and to ensure that the transformation of our health service reduces, and not widens, health inequalities.

In light of the disproportionate impact of COVID-19 on different communities, in particular people from Black and Minority Ethnic (BAME) backgrounds, this agenda is more important than ever.

Recognising our leadership role in championing and developing diversity within the NHS innovation pipeline, the AHSN Network launched a series of pledges in September 2019 to support diversity and inclusivity in healthcare innovation.

We are using these pledges to hold ourselves to account for the way that we identify and nurture innovation and the innovators behind them, both inside and outside the NHS, and will publish our progress annually.

The pledges were launched as part of a special report, highlighting the compelling business case for increased diversity in innovation and celebrating the contribution and stories of (BAME) innovators. Read the report here.
Our diversity pledges

**We commit to implementing a recognised process to self-assess and improve equality performance in each of our organisations**

- We will set annual equality and diversity objectives, report on these to our Boards and publish achievements and challenges in our annual reports.
- We will have a designated person within each organisation with whom concerns about equality and diversity can be raised.
- The AHSN Network will annually review and publish its collective performance including performance for any national programmes, for example ensuring diverse representation in decision making processes for the NHS Innovation Accelerator.

**We commit to empowering and supporting our staff to be positive role models for equality and diversity**

- We will undertake positive action to ensure our workforce reflects the diversity of the communities we serve including steps to ensure diversity at all levels.
- We will encourage our staff to positively challenge and promote positive action when they see a lack of diversity.
- All AHSN staff will have undertaken unconscious bias training by the end of 2020.

**We commit to understanding the impact of our work on all members of our communities and for our work to reflect the equality and diversity within these communities**

- We will carry out Equality Analysis on all national and key local projects and programmes.
- We will actively engage with, and involve, diverse communities in our work, ensuring we include people from marginalised and seldom-heard groups.
- Our publications and communications will promote diversity, highlight diverse role models, challenge stereotypes and champion the positive impact of diversity on innovation.
The work of England’s 15 AHSNs is transforming lives through innovation – delivering better health outcomes, improving patient experience and safety, driving down the cost of care and supporting economic growth.

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 national programmes agreed with our national commissioners. This report focuses on our national work and impact. To learn more about individual AHSN activity in different parts of the country, visit the individual AHSN websites.

Our main national commissions are:

Adoption and spread programmes
Commissioned by NHS England, the AHSNs delivered seven programmes, developed regionally and selected for national adoption and spread during 2018-20:

- Atrial Fibrillation
- Emergency Laparotomy
- ESCAPE-pain
- PINCER
- Prevention of Cerebral Palsy in PreTerm Labour (PReCePT)
- Serenity Integrated Mentoring (SIM)
- Transfer of Care Around Medicines (TCAM)

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

Supporting innovators and driving economic growth
Funded by the government’s Office for Life Sciences, our Innovation Exchange is a coordinated approach to identifying and helping to spread innovations with the potential to transform the lives of patients, while supporting the growth of companies we work with.

Fast tracking rollout of latest technologies
As a key member of the Accelerated Access Collaborative (AAC), the AHSN Network is supporting NHS adoption of nine transformative technologies and medicines through the Innovation & Technology Payment (ITP) and Rapid Uptake Products (RUP) programmes.
Atrial fibrillation (AF)

Sharing learning and spreading best practice from across the 15 AHSNs to reduce AF-related strokes

Atrial fibrillation (AF) is the most common cause of an irregular heart rhythm and the cause of 20% of strokes. Despite the serious impact, many people are unaware they have the condition.

Since 2016, the AHSN Network has been driving the spread and adoption of AF best practice across the country to improve care and outcomes for patients. This national programme of work has focussed on the three key elements of the AF pathway:

- **Detect** – raising public awareness of AF and the importance of pulse rhythm testing to identify those with undiagnosed AF
- **Protect** – supporting healthcare professionals to offer optimal anticoagulation medication to all those who would benefit
- **Perfect** – supporting patients with their anticoagulation medication and supporting clinicians to review patients with AF

Pulse checks for over 65s, mobile ECG devices for GP surgeries and pharmacies, and new ‘virtual clinics’ involving specialists working with GPs to advise on the best treatment for people with the condition have been amongst the varied activities undertaken as part of this life-saving work across the country.

Find out more about our AF programme at [www.ahsnnetwork.com/atrial-fibrillation](http://www.ahsnnetwork.com/atrial-fibrillation)
Emergency Laparotomy

A collaborative approach to improving standards of care for patients undergoing emergency laparotomy surgery

Emergency laparotomy is a major surgical procedure on the abdomen, with 30-50,000 performed every year in the UK. Around 15% of patients die within 30 days of surgery, and this mortality rate can be improved through applying care standards consistently. Over a quarter of patients remain in hospital for more than 20 days after surgery, costing the NHS over £200 million a year.

Funded by the Health Foundation, the Emergency Laparotomy Collaborative was formed in 2015 to use a quality improvement (QI) approach to tackle these issues. In 2018-20 all 15 AHSNs worked with their local hospital trusts to adopt this approach.

Find out more about our Emergency Laparotomy programme at www.ahsnnetwork.com/emergency-laparotomy-collaborative
ESCAPE-pain

A group rehabilitation programme for people with osteoarthritis

Chronic joint pain, or osteoarthritis, affects one in five people over the age of 50, and one in two people over the age of 80 in the UK. This condition can cause considerable suffering and distress, and can reduce quality of life.

A small proportion (about 5% of the eight to ten million sufferers in the UK) proceed to surgical intervention. However, the vast majority are managed in the community, usually with painkillers – which are both unpopular with patients, and potentially harmful. Roughly one in four GP appointments are estimated to be related to joint pain.

During 2018-20, the AHSNs supported uptake of the ESCAPE-pain rehabilitation programme for people with chronic joint pain of the knees and hips, providing self-management support in the community. The course is delivered by a physiotherapist or an exercise professional in 10 to 12 sessions over five to six weeks.

During COVID-19, free ESCAPE-pain digital support tools have been used to replicate the face-to-face programme.

Find out more about our ESCAPE-pain programme at www.ahsnnetwork.com/escape-pain

12,781 people with osteoarthritis participated in ESCAPE-Pain

Spread from 50 to 280 sites

More than 24x increase in patients benefiting

44% increase in participating sites in 2019/20

(Pre-AHSN National Programme)
PINCER – preventing prescribing errors

Supporting pharmacists and GPs to identify patients at risk from their medications and helping them take the right action

Prescribing errors in general practice are an expensive, preventable cause of safety incidents, illness, hospitalisations and even deaths. Serious errors affect one in 550 prescription items, while hazardous prescribing in general practice contributes to around 1 in 25 hospital admissions.

Led by primary care pharmacists and pharmacy technicians, AHSNs rolled out the PINCER intervention nationally in 2018-20. It involves searching GP clinical systems using computerised prescribing safety indicators to identify patients at risk from their medications and then taking acting to correct them.

Find out more about our PINCER programme at www.ahsnnetwork.com/pincer

Adoption and spread programmes

35% of GP Practices in England have adopted PINCER

Increased from 50 to 2,571 GP practices since April 2018

13,387 fewer patients at risk from harm from medication errors
Adoption and spread programmes

Prevention of Cerebral Palsy in PreTerm Labour (PReCePT)

Working with maternity hospitals to use magnesium sulphate to prevent cerebral palsy in very premature babies.

Every year around 4,000 women in the UK give birth very early because of complications with their pregnancy. While the survival of babies born preterm has improved, there has been an increase in the number of preterm babies developing cerebral palsy.

Use of magnesium sulphate in preterm labour reduces the risk of cerebral palsy by 30% and costs from just £1 a dose.

We delivered our national PReCePT programme during 2018-20, working with all maternity hospitals in England to make magnesium sulphate 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 across the country.

Find out more about our PReCePT programme at www.ahsnnetwork.com/precept

![Graph showing adoption and spread of PReCePT programme](image-url)

- **Additional 1,106 mothers received magnesium sulphate**
- **An estimated 30 cases of cerebral palsy avoided**
- **Increase from 5 maternity units adopting to 156**
- **Estimated £23.9 million savings in lifetime health and social care costs**
Serenity Integrated Mentoring (SIM)

**Bringing together police and community mental health services to make a positive difference to the lives of people with complex mental health needs**

Across the UK, emergency and healthcare services respond every minute to people in mental health crisis. Mental health crisis calls are increasing consistently each year.

But there is also ‘a problem within this problem’ because in every community, up to 40% of this demand is caused by the same patients: a small number of repeat callers who struggle to manage highly complex behavioural disorders and who, as a result place intensive operational demands on police, ambulance, A&E departments and mental health teams.

In 2018-20, AHSNs supported the national rollout of Serenity Integrated Mentoring (SIM), an innovative mental health workforce model that takes a multi-agency approach to better support people with complex mental health needs.

Find out more about our SIM programme at www.ahsnnetwork.com/serenity-integrated-mentoring
Transfer of Care Around Medicines (TCAM)

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

When some patients leave hospital they can need extra support taking their prescribed medicines. This may be because their medicines have changed or they need a bit of 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 Transfer of Care Around Medicines (TCAM) programme during 2018-20. 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.

Find out more about our TCAM programme at www.ahsnnetwork.com/transfers-care-around-medicines-tcam

Adoption and spread programmes

Spread from **20 to 61** acute trusts

Over **57,000** patient referrals completed in 2019/20

More than **10x** increase in patients benefiting

**42%** of all acute trusts have implemented

(Pre-AHSN National Programme)
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 coordinated by NHS England and NHS Improvement, and hosted locally by the AHSNs. They deliver the five National Patient Safety Improvement Programmes (SIPs), which are a key part of the NHS Patient Safety Strategy and collectively form the largest safety initiative in the history of the NHS.

The five SIPs are: managing deterioration, medicines safety, maternity and neonatal, mental health, and adoption and spread.

The SIPs aim to create continuous and sustainable improvement in settings such as maternity units, emergency departments, mental health trusts, GP practices and care homes through:

- **Quality improvement (QI) capability**
- **Culture**
- **Evidence-based improvement**
- **System-level change**
This programme contributes to the avoidance of harm or death caused by the failure to recognise or respond to physical deterioration in a patient’s condition, wherever they are being cared for.

PSCs do this by promoting new system pathways that include the use of the National Early Warning Score (NEWS2). In community settings such as care homes, we promote equivalents that can spot the ‘soft signs’ of deterioration such as the RESTORE2 tool.

We collaborated with Health Education England to create a training programme for care home staff, including 14 films that explain how to spot the early signs of sepsis and serious illness and how to take the measurements needed for a NEWS2 score. The videos were released in March 2020.

Improving safety

Managing deterioration

99% of all acute and ambulance trusts use NEWS2

Elements of RESTORE2 are being used in 13 out of the 15 PSC areas

120,000+ views of our training films on YouTube
The Maternity and Neonatal Safety Improvement Programme (MatNeoSiP) improves the safety and outcomes for women, babies and families by reducing unwarranted variations in care.

Regional MatNeo Local Learning Systems have become well-established and work on a number of quality improvement (QI) projects tailored to their area’s priorities.

### Improving safety

#### Maternity and neonatal

- **Detection and management of diabetes in pregnancy**: 23%
- **Smoke-free pregnancies**: 23%
- **Optimisation and stabilisation of the very preterm infant**: 23%
- **Detection and management of neonatal hypoglycaemia**: 3%
- **Early recognition and management of deterioration**: 40%
Adoption and spread

The PSCs support the adoption and spread of effective, evidence-based practice, including:

- COPD discharge care bundle
- Emergency department safety checklist
- Emergency laparotomy discharge care bundle - see page 8
- Preventing cerebral palsy in preterm babies (PReCePT) – see page 11

**COPD (chronic obstructive pulmonary disease) discharge care bundle**

In the Kent Surrey Sussex area, on average 9,029 people are admitted to hospital with COPD every year. Improved outcomes were recorded from 2014/15 to 2018/19, during which the COPD care bundle compliance increased:

- **Reduced length of stay:** from 5.7 days to 4.8 days
- **Regional downward trend in in-patient mortality:** from 4.49% to 3.67%.

92% of acute trusts are using one or more elements of the COPD care bundle.

The number of patients receiving every element of the care bundle they were eligible for increased from 9% to 16%.
Improving safety

Adoption and spread

Emergency department (ED) safety checklist

Results from research in the West of England showed that the ED checklist improved clinical quality and patient safety. For example:

- Increase of over 5% in CT scanning within an hour for patients with suspected stroke.
- Increase of 25% in hourly observations.
- No clinical incidents relating to failure or delay in recognising a deteriorating patient.
- Reduction in the number of complaints received from patients and families.

Number of NHS hospitals adopting the ED Safety Checklist

- 76% of trusts adopted the ED safety checklist
- 50% increase in sites using the ED safety checklist
Medicines safety

The Medicines Safety Improvement Programme (MedSIP) will support projects that reduce avoidable, medication-related harm in the NHS, focusing on high-risk drugs, situations and vulnerable patients.

Scoping survey

We carried out a scoping survey to gather views on what the programme activities should prioritise, which received 1,102 responses.

Analysis showed common themes around were:

- Transitions of care
- Interruptions during medicines administration
- Communication between professionals

1,102 care homes in England responded to our medicines safety survey
2019-20: AHSN Network industry and economic growth impacts

- 2,540+ companies supported
- 5,040+ interactions with companies
- 580+ jobs created
- 480+ jobs safeguarded
- 150+ companies created
- £322 million+ investment leveraged
Supporting innovators and driving economic growth

The Innovation Exchange

The AHSN Network helps mobilise the value that the NHS can add as an economic asset to the UK economy.

We broker access to a range of expert support and services across the health and care sectors that support NHS innovators and companies to realise the commercial and economic potential of their ideas.

AHSNs support the regional 'import and export' of healthcare innovation. Funded by the government’s Office for Life Sciences, our Innovation Exchange is a coordinated approach to identifying and helping to spread innovations with the potential to transform the lives of patients, while supporting the growth of companies we work with.

The Innovation Exchange has four structured elements:

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

In September 2019, we launched our national Innovation Exchange digital gateway at www.ahsninnovationexchange.co.uk. By the end of March 2020, the website had attracted nearly 5,000 visitors.

Bridging the Gap

AHSN Bridging the Gap events are aimed at health technology innovators and companies who are interested in accessing the NHS marketplace to improve health and care for patients and citizens, and who have a product or service that is ready for scaling up.

Held around the country and free to attend, the events include a range of talks, workshops, one-to-one advice sessions and networking opportunities, plus signposting to a range of services available to industry from both the AHSN Network and our partners under one roof.

During 2019-20, we held three regional Bridging the Gap events at the Wellcome Collection in London, Southampton Science Park and in Hinckley, Leicestershire, attracting nearly 400 delegates.

4,877

visitors to the Innovation Exchange digital gateway in 2019-20
Supporting innovators and driving economic growth

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 leading on competitions designed to attract innovations that respond to defined needs of the health and care sector. AHSNs are uniquely placed to understand and articulate the demands of the NHS and patients, ensuring competitions are targeted at areas of maximum potential benefit. AHSN teams specialising in health innovation form a central part of the selection process, and take forward relationships with the successful companies to help maximise traction within the NHS and social care.

NHS Innovation Accelerator

The NHS Innovation Accelerator (NIA) supports faster uptake and spread of high impact, evidence-based innovations across England’s NHS, benefitting 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 an innovation.

As of February 2020:
- the NIA has successfully supported 49 Fellows representing 52 innovations
- 2,210+ NHS sites are using NIA innovations
- £134.8 million+ external funding has been raised by NIA Fellows
- 468 new jobs have been created by NIA companies
- 113 awards have been won by NIA Fellows

TechForce19: supporting the COVID-19 response

In March 2020, the AHSN Network mobilised quickly to support the call out from NHSX to innovators as part of the COVID-19 response. The TechForce19 challenge focused on digital solutions to support the elderly, vulnerable or isolated.

We helped to evaluate the submissions, bringing in commercial experts from across the Network, as well as our seven digital leads.

As a result of the social media campaign driven by the AHSNs, 1,643 applications were received in just one week. 18 companies were awarded funding up to £25,000 to rapidly test their products over a two to three week period, each supported by an AHSN.

Further assessment is now taking place to better understand the potential and scope for accelerated deployment at scale, based on the evidence gathered.

The AHSN Network provided guidance and leadership for five SBRI Healthcare competitions in 2019/20:
- Improving outcomes in musculoskeletal disorders - May 2019
- Dentistry, oral health and oral cancers - May 2019
- Cardiovascular disease - June 2019
- Integrated care and social care - June 2019

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- 113 awards have been won by NIA Fellows
The AHSN Network is a key member of the Accelerated Access Collaborative (AAC), industry, government, regulators, patients and the NHS to remove barriers and accelerate the introduction of ground-breaking 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.

As part of our support, AHSNs are driving adoption of a number of transformative technologies and medicines via the Innovation and Technology Payment (ITP) and Rapid Uptake Products (RUP) programmes, including:

- **Urolift**  
  A minimally invasive procedure for treating lower urinary tract symptoms of benign prostatic hyperplasia

- **Cladribine**  
  An oral treatment given as two treatment courses, one year apart, for treating highly active relapsing-remitting multiple sclerosis in adults

- **PCSK9i**  
  Medication for treatment of very high cholesterol, used together with a statin-type cholesterol-lowering medicine, or in those who are unable to take or tolerate a statin

- **PlGF 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

- **High sensitivity troponin test**  
  Blood test used in an early rule out protocol for patients with suspected myocardial infarction

- **Endocuff**  
  A distal device that fits onto the end of a colonoscope, providing increased flexibility and stability during a colonoscopy procedure

- **HeartFlow**  
  Creates a 3D model of the coronary arteries to help clinicians to rapidly diagnose patients with suspected coronary artery disease from coronary CT angiography

- **Non Injectable Connector**  
  A needle-free arterial connector that improves patient safety by preventing accidental intra-arterial injection of drugs

- **SecurAcath**  
  A device to secure catheters without requiring sutures or adhesives.

553,290  
ITP units/scans supplied for patients in the last three years
Fast-tracking rollout of latest technology

Urolift

A minimally invasive procedure for treating lower urinary tract symptoms of benign prostatic hyperplasia

Uptake since AHSN support started in 2018

Rise in trust adoption from 28 to 78 since April 2018

Rise in procedures from 455 to 3,955 since April 2018

90% of annual trajectory achieved *

* M12 figures impacted by suspension of elective activity in response to COVID-19
Fast-tracking rollout of latest technology

Cladribine
An oral treatment given as two treatment courses, one year apart, for treating highly active relapsing-remitting multiple sclerosis in adults

Uptake in 2019-20

* M12 uptake impacted by issuing of guidance related to immune suppressant therapies in response to COVID-19
Fast-tracking rollout of latest technology

**PCSK9i**

Medication for treatment of very high cholesterol, used together with a statin-type cholesterol lowering medicine, or in those who are unable to take or tolerate a statin

**Uptake in 2019-20**

*Considerable lag period expected before PCSK9i adoption rates will increase as eligible patients must first be optimised on maximally tolerated doses of high intensity statins and Ezetimibe. Roll-out and impact of recently introduced initiatives to address adoption barriers have been adversely affected by COVID-19.*
PlGF based testing

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

Uptake in 2019-20

- **Maternity Units**
- **Tests**

139% of annual trajectory achieved
Fast-tracking rollout of latest technology

Endocuff

A distal device that fits onto the end of a colonoscope, providing increased flexibility and stability during a colonoscopy procedure

Uptake since AHSN support started in 2018

Increase from 10 to 96 trusts since April 2018

73% of eligible trusts adopted
Fast-tracking rollout of latest technology

HeartFlow

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

Uptake since AHSN support started in 2018

- **6x** increase in number of NHS trusts adopting since April 2018
- **57%** of eligible trusts adopted since April 2018
- **111%** of annual trajectory achieved

Uptake in 2019-20


- **Number of scans analysed**: June 18 - 0, Sept 18 - 5, Dec 18 - 25, Mar 19 - 8000, Jun 19 - 12000, Sep 19 - 11000, Dec 19 - 10000, Mar 20 - 9000

Patients in quarter:
- Q1: 0
- Q2: 1000
- Q3: 5000
- Q4: 8000

Patients cumulative:
- Q3: 7000
- Q4: 11000

Patients projected cumulative:
- Q4: 12000
Fast-tracking rollout of latest technology

Non Injectable Connector

A needle-free arterial connector that improves patient safety by preventing accidental intra-arterial injection of drugs

Uptake since AHSN support started in 2018

Number of units deployed since April 2018: 140,000+

10x increase in units deployed
SecurAcath
A device to secure catheters without requiring sutures or adhesives

Uptake since AHSN support started in 2018

Fast-tracking rollout of latest technology

165,000+ units deployed since April 2018

Increased from 48 to 96 trusts

Number of units deployed

Number of NHS trusts adopting

(Pre-AHSN involvement)
HSNs each work within their regional health system to spread innovation, whilst also operating as a connected national network. This ability to respond locally and collaborate across England to support rapid transformative change – enabled us to immediately realign our resources to the COVID-19 response from March 2020 onwards.

Regionally our bespoke approach has focused on providing expertise to our NHS regions: identifying technologies to assist health organisations manage their response; identifying and resolving issues in the supply of personal protective equipment (PPE); driving the digitisation of primary care; and supporting our care homes.

We have responded at scale to support the national COVID-19 effort. Our contribution has been outstanding with all AHSNs supporting or deploying team members to assist the rapid rollout of digital primary care, supporting NHS England and Improvement, NHSX and NHS Digital to achieve a near-total uptake of video and online consultation technologies in only two months across GP practices in England.

We have also worked at scale to support the safety of patients, care home residents and clinical staff through providing training resources to care homes and supporting local PPE procurement initiatives. Many of our staff have gone back to support the NHS in managerial or clinical roles.

And we are now looking to the future by partnering with the NHS Confederation and the Health Foundation on the national NHS Reset campaign. Find out more about the AHSNs’ contribution to the Reset debate here.
Timeline: our response to COVID-19

March

TOP TECH
List of 200+ ‘ready to go’ innovations drawn up to support local systems

March

ONLINE TRIAGE
Leading role to embed online consultations in primary care practices

April

eRD GOES NATIONAL
We begin national roll out of Electronic Repeat Dispensing

April

PATIENT SAFETY
Refocused Patient Safety work on COVID priorities: critical care & care homes

April

TECHFORCE19
TechForce19 winners announced – 1,600 applications reviewed by AHSNs in just three weeks

April

RCGP WEBINAR
Over 10,000 people have viewed our webinar run with the Royal College of General Practitioners (RCGP) on patient assessment

April

ICU LEARNING
First in our series of COVID reports collating learning from intensive care units across Europe

May

STROKE SERVICES
Guidance launched on adapting stroke services during & after COVID-19

May

RESET
Launched National ‘ReSet’ campaign with NHS Confederation & Health Foundation

May

PRIMARY CARE
Over 3,000 people have watched our webinar with RCGP on primary care in care homes during COVID

May

WOUND CARE
Resources launched on caring for wounds & pressure ulcers at home and in care homes during COVID
Timeline: our response to COVID-19

May
- CARE HOMES
  Training and resources for care homes on spotting 'soft signs' of deterioration and sepsis

May
- PReCePT
  Guidance issued on use of magnesium sulphate in preterm labour during COVID-19

June
- VULNERABLE GROUPS
  AHSN community of practice formed to support vulnerable groups at risk of COVID-19

June
- TRACHEOSTOMY
  Toolkit launched in response to increase in tracheostomy procedures

July
- LEARNING
  Webinar with NHS Confederation and Health Foundation on learning from rapid improvement and innovation during COVID

July
- COVID & CHILDREN
  2,000 people watched our webinar with RCGP on primary care support for families and children

July
- MEDICINE SAFETY
  Working group established to explore TCAM programme in care homes

July
- HEALTH & WEALTH
  Report published by Yorkshire & Humber AHSN, NHS Confederation and Yorkshire Universities

July
- GENOMICS
  Online round table to launch AHSN Network’s new report on technologies for personalised medicine

July
- INDUSTRY INSIGHT
  Virtual event for industry & healthcare to share experiences and learn lessons on supporting innovation

July
- TECHNOLOGY FOR LTCs
  King’s Fund report published, commissioned by AHSN Network on transformative technology for long-term health conditions
The findings from a major survey to identify local NHS innovation and research needs were published by the AHSN Network in May 2019.

The views of local health stakeholders, including clinical leaders, managers and directors, within each AHSN region were collected through qualitative interviews with 61 people and a questionnaire which received more than 250 responses in total.

The report outlines the national findings from the survey with local health and social care stakeholders. It includes a detailed analysis of the innovation and research needs at local level across all AHSNs. Read the full report here.

 Whilst there were some differences in regional priorities, common themes emerged which reflected wider challenges facing the NHS and align with the priorities of the NHS Long Term Plan.

The survey was commissioned by the AHSN Network, in partnership with NHS England and the National Institute for Health Research, to support the publication of a statement of local NHS research and innovation needs for each AHSN region – as one of the actions in the NHS England and NIHR joint paper on ‘12 actions to support research in the NHS’.

Further regional discussions have since taken place, involving patients, the wider public and the research community, to refine the priorities identified. Each AHSN region has published a statement of local innovation and research needs.

Common themes

- A need for innovation and research addressing workforce challenges
- Delivery of mental health services and providing care for patients with mental health needs, particularly in children and young people
- Integrating services to provide effective care for patients with complex needs, including multi-morbidity and frailty
- Seeking opportunities to drive the adoption of digital and AI technologies to support healthcare transformation and enable effective self-care
Commissioned by NHS England, three programmes have been selected for national adoption and spread across the AHSN Network from April 2020. These are:

**Early Intervention Eating Disorders**

We are supporting mental health teams across England to speed up diagnosis and treatment of eating disorders in young people aged 16 to 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 to 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 coordinated early care, with a central focus on reducing the duration of an untreated eating disorder. It consists of a service model and a care package.

**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.

The core element of this programme will involve work with trusts across England to implement an objective assessment tool (measuring attention, impulsivity and activity) to supplement current clinical assessment processes. Research 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) after fewer patient visits, improving patient, family and clinician experience.

QbTest is an objective assessment tool supported by the AHSNs. East Midlands AHSN supported a 12-month, real-world demonstrator project, where QbTest was used in different pathways across three East Midlands NHS trusts. [Read the case study here.](#)

**Lipid management and FH**

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, introducing 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.
Find details for your regional AHSN at www.ahsnnetwork.com

For case studies on innovations supported by the AHSNs visit our Atlas of Solutions in Healthcare at atlas.ahsnnetwork.com

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