

The AHSN Network

Guide to the AHSN Network 2018

Our collective impact and future plans



Over the last five years, the 15 Academic Health Science Networks (AHSNs) have pioneered new ways to spread and adopt healthcare innovation.

First licensed by NHS England in 2013, we have rapidly become a vital part of the country's health economy, connecting and brokering partnerships between health and care, academia, the third sector and industry.

We bridge the gaps to respond to the diverse needs of our patients and populations through partnership and collaboration.

AHSNs benefit from a dual regional and national perspective. Each AHSN is embedded in its regional health and care community, understanding the system and patient needs on the ground. Each AHSN is also part of the national AHSN Network, linked into a unique collaborative of expertise and experience, sharing learning, pooling intelligence, and benefitting from a pipeline of emerging and proven solutions from around the country.



Foreword from Mike Hannay, Chair of the AHSN Network

It's been quite a journey since the 15 AHSNs were first licensed by NHS England back in 2013.

There have been challenges and obstacles along the way, countless lessons learned, and some memorable highlights.

There are of course the big ticket achievements: the bold examples of healthcare innovation and transformation that AHSNs have helped spot, nurture and embed into our systems. In the last five years, we've made some significant impacts. Over 22 million patients have benefited from our work so far, while we have managed to introduce over 330 innovations into the health service.

We don't do any of this work alone. We are catalysts and connectors. We bring the right individuals and organisations together to make change happen.

And this is why there are countless 'hidden' success stories: the invaluable introductions made at our connection

events; the positive influence we've had on changing work cultures and practices; and the incredible insights we've encouraged from patients and the public in co-creating new solutions and redesigning existing services.

Partnership working is essential to driving innovation. At a national level, we work strategically with NHS England, NHS Improvement, NHS Digital, government departments and many more to ensure innovation is at the heart of the healthcare and life sciences agenda. And regionally too, every AHSN plays a pivotal role in bringing together the NHS, social care, academic, industry and voluntary sectors. No-one is better placed than AHSNs to understand the 'push and pull' of demand on innovation.

In our new licence from NHS England, the 15 AHSNs will operate as the key innovation arm of the NHS; supporting our health and care partners to deliver improvements that lead to better patient outcomes, drive down the cost of care and stimulate economic growth.

A number of programmes developed or piloted regionally have been selected for national adoption and spread across the AHSN Network during 2018-2020. You'll find more on these in the following pages.

The AHSN Network will continue to host the 15 regional Patient Safety Collaboratives (PSCs), commissioned by NHS Improvement. The PSCs are playing a vitally important role in creating safer systems of care.

And funded by the government's Office for Life Sciences, we are coordinating a national network of Innovation Exchanges, building on our unique expertise and cross-sector connections.

With what seems like a current explosion of innovation and new technologies, the role of the AHSNs isn't simply to support the NHS in identifying those in which to invest, but also in helping to build health and care ecosystems, with cultures, leadership and pathways ready to accept and work with these new solutions.

This is where most change needs to happen, and so innovation is not just about new technology; I like to think we're as much in the business of social innovation.

Of course, this year we are celebrating 70 years of the National Health Service, and the NHS is in itself an incredible example of social innovation. I'm proud that in the AHSNs this spirit is strong, and that together with our partners we are evolving our health service fit for today and another 70 years to come 🇬🇧

The AHSN Network in numbers

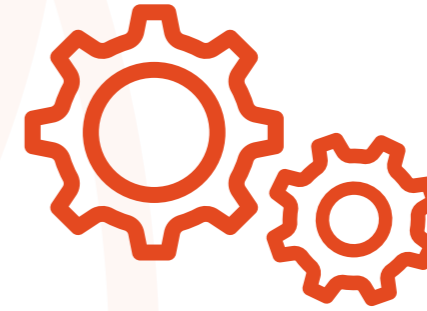
Since the 15 AHSNs were first established in 2013, our collective impact has been significant. We are catalysts for innovation. Through our communities and collaborations, we are proud to make things happen.



Over **22 million** patients benefited from AHSN input



Over **£330 million** leveraged by AHSNs to improve health and support NHS, care and industry partners



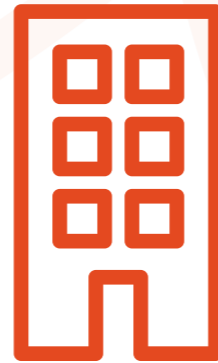
Hundreds of commercial innovators supported



Over **500** jobs created



Over **330 innovations** introduced through AHSN influence



Over **11,000 locations** actively developing and using innovations supported by AHSNs



Over **150 companies** supported by our innovation development programme, SBRI* Healthcare – delivering over £19 million annual recurring savings to health and care



1,242 NHS sites using NHS Innovation Accelerator solutions



67% reduction in AKI† mortality and sepsis mortality down by 24% through our Patient Safety Collaboratives in partnership with NHS Improvement

* Small Business Research Initiative
† Acute Kidney Injury

What our partners say about us



I don't think there's a more important question that the NHS faces right now than how can we get better at curating and spreading innovation? And who will serve as the NHS distribution network for innovation? I think the answer is the AHSNs as they enter their next phase and increasingly work together as a single national network of networks, helping to destroy NHS 'not invented here' syndrome.

Ian Dodge, National Director, Strategy and Innovation, NHS England



AHSNs are experts in best practice – and that can be incredibly diverse. Working with them you benefit not only from that expertise but also the strength of those local relationships.

Lindsay Lambeth, Principal Programme Manager for Service Design, Age UK



AHSNs really do bridge the triangle between industry, healthcare and academia, and bring them together as a really powerful force. And that's what we need to see transformation happen.

Francis White, VP of Sales & Business Development, AliveCor



The question with innovation is how do you take small instances of brilliant innovation and get them round the system? That's what I think AHSNs can do. They find and work with people who've got those brilliant ideas and give them exposure and get them round the system. Then the stuff that really works we can get nationwide.

Lord O'Shaughnessey, Health Minister



I am pleased to be working closely with the AHSN Network. AHSNs are NHS Improvement's delivery partners for the Patient Safety Collaboratives, which seek to improve patient safety, facilitate quality improvement and create a learning system across the NHS. The AHSNs are ideally placed to drive innovation and improvement across the system with their strong relationships across all sectors of healthcare, academia and industry.

Celia Ingham Clark, Medical Director for Clinical Effectiveness, NHS England, and Interim NHS National Director of Patient Safety, NHS Improvement



As a clinical innovator, the AHSNs have been instrumental in facilitating the adoption and spread of our innovations across the NHS which I believe would be all but impossible without their support. They proactively help innovators to develop their inventions and support trusts to adopt new best practice and are an ideal link between the two.

Dr Maryanne Mariyaselvam, Clinical Fellow, Queen Elizabeth Hospital Kings Lynn and University of Cambridge



I think the AHSNs give us the opportunity to work strategically together on priorities for the NHS and that is really starting to build momentum. The AHSNs are helping us really understand how we can deliver system benefits as well as patient benefits.

Mike Thompson, Chief Executive, ABPI



The AHSNs are a fantastic link to what is happening on the ground, providing support and expertise to nurture health and care innovation. They've established their network to enable ideas to be sought out, championed or challenged - providing a stable platform in an otherwise complex landscape.

Juliet Bauer, Chief Digital Officer, NHS England

Navigating the healthcare innovation landscape

AHSNs work at the interface between healthcare providers, commissioners and industry to 'bridge the gap' and connect the sectors, creating an innovation pipeline from research and product development through to commercialisation.

We invest time and resources into collaborating with industry to support and develop value propositions for proven products and services, and to make introductions to the NHS. This helps patients benefit from better products and services faster, and supports economic growth by making it easier for industry to do business with the NHS.

In 2017/18 we worked with over 2,000 companies and helped more than 1,000 NHS organisations use new products or services, benefitting more than 250,000 patients.

Brokering relationships between the life sciences industry, research and healthcare, we help the NHS find and filter new products. We work as a national network to speed up the spread and adoption of the ones with proven impact and value that meet genuine need.

Our work with industry is all about patient benefits from products and services that are evaluated and supported by evidence. Consultation and co-creation with patients and the public is vital to our approach.



The innovation pathway

We have developed the 'innovation pathway' which illustrates the range of specialist support available from AHSNs to help ensure new innovations achieve both patient benefit and commercial success. Our starting point is working with the NHS to articulate what it needs from industry so we can support product and service development from ideas through to implementation.

AHSNs' in-house knowledge and skills are complemented through our work with partners on a number of national programmes.

Innovation Exchanges

AHSNs support the regional 'import and export' of healthcare innovation through our national network of Innovation Exchanges – processes that bring together health and care partners with industry and third sector innovators to match health needs with potential solutions.

Funded by the government's Office for Life Sciences, Innovation Exchanges build on AHSNs' unique expertise and cross-sector connections, enabling us to identify common challenges and quickly bring people and organisations

together to develop, test and spread proven innovation.

Through our Innovation Exchanges, AHSNs will identify products with the most potential to make a national impact for review by the Accelerated Access Collaborative. Each year this national group (made up of partners including NHS England, NHS Improvement, the government, NICE, AHSNs and patient representatives) will select a small number of the innovations put forward to spread and adopt across all 15 AHSNs.

www.ahsnnetwork.com/innovation-exchanges/

SBRI Healthcare

SBRI Healthcare supports the co-development of innovative solutions for identified health needs. Funded by NHS England and run by the AHSNs, SBRI Healthcare has supported over 150 companies to develop their innovations and bring them to the NHS.

www.sbrihealthcare.co.uk

NHS Innovation Accelerator (NIA)

The NIA supports the 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, it currently supports 36 'Fellows' representing 37 innovations.

www.nhsaccelerator.com

Innovation Technology Payment (ITP)

Through the ITP, NHS organisations are supported to adopt innovative products and technologies by removing the financial or procurement barriers. This NHS England scheme is delivered in partnership with the AHSNs, sponsors, national and international experts

Spread and adoption of innovation: national programmes

These seven programmes, developed regionally, have been selected for national adoption and spread across the AHSN Network during 2018-2020.

Emergency Laparotomy Collaborative

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

PRECePT

Working with maternity units to use magnesium sulphate to prevent cerebral palsy in preterm labour.

Transfers of Care Around Medicine (TCAM)

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

Atrial Fibrillation (AF)

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

PINCER - preventing prescribing errors

Supporting pharmacists and GPs to identify patients at risk from their medications and taking the right action.

Serenity Integrated Mentoring (SIM)

Bringing together police and healthcare professionals to make a positive difference to the lives of people with complex mental health needs.

ESCAPE-pain

A group rehabilitation programme for people with knee and/or hip osteoarthritis, providing self-management support in the community.

Atrial Fibrillation: detect, protect and perfect

Atrial fibrillation (AF) is the most common type of irregular heart rhythm. In England a large number of individuals are unaware they have AF, and some people with known AF do not receive optimal treatment, resulting in avoidable strokes. AF-related strokes represent a significant burden to patients, carers, the NHS and social care.

Understanding demand



1 million

people in England are diagnosed with AF.



An estimated

400,000 people

are unaware they have AF, as not everyone experiences the symptoms.



AF is responsible for **1 in 5 strokes**

with survivors likely to live with debilitating consequences.

The AHSNs collectively identified that the spread and adoption of AF best practice across the AHSN Network could make a stepped improvement in care outcomes, leading to a reduction in AF-related strokes across England.

Based on proven best practice across the AHSNs in recent years, 14 initiatives have been selected for spread and

adoption through our national AF programme, supported by our community of practice of regional AF clinicians and managers to share learning and amplify impact.

Spanning the AF clinical pathway, our national programme is drawing on this shared experience and intelligence to 'detect, protect and perfect'.

Detect

We are rapidly increasing the detection of AF through the use of manual pulse checks or mobile ECG devices. Early detection of AF will allow the initiation of protective anticoagulation therapy.

AHSNs are distributing more than 6,000 mobile electrocardiogram (ECG) units to GP practices,



pharmacies and other community settings across England. This technology detects irregular heart rhythms quickly and easily, enabling NHS staff to refer patients for the appropriate follow-up and treatment.

Protect

We are increasing anticoagulant therapy, in those diagnosed with AF and who are clinically indicated, to reduce the risk of stroke.

A 'virtual clinic' approach targeting AF patients on GP registers who were not receiving anticoagulation, initially led by Lambeth and Southwark CCGs and King's College Hospital, is now being rolled out by a number of AHSNs.

In this model, specialist anticoagulant pharmacists are

commissioned to deliver virtual clinics in primary care, to support the GPs with evidence-based decision making regarding anticoagulation for patients with AF.

Scaling up this local pharmacist-led model across England, could prevent an estimated 3,000 AF related strokes and save 750 lives.

Perfect

We are optimising anticoagulation therapy in people newly diagnosed and those with existing AF.

The three London AHSNs have worked collaboratively with the London Clinical Network to develop an online interactive toolkit. This guides healthcare professionals and commissioners through the entire AF-pathway, providing a

range of resources to improve the detection and treatment of people with AF.

Find out more at www.bit.ly/AF-toolkit

Ambitious targets

By the end of 2019/20 we aim to have detected an additional 134,000 people with AF across England, with an additional 100,000 people with AF being newly prescribed appropriate anticoagulation therapy.

Our interventions will:

- Prevent over 4,000 strokes.
- Save over 1,000 lives.
- Represent NHS cost savings of over £84 million.
- Represent social care cost savings of over £100 million



Preventing prescribing errors with PINCER

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.

Outcomes of a trial published in The Lancet showed a reduction in error rates of up to 50% following adoption of PINCER - a pharmacist-led IT intervention for reducing clinically important errors in general practice prescribing.

These original PINCER indicators have been incorporated into National Institute for Health and Care Excellence (NICE) Medicines Optimisation Clinical Guideline (May 2015).

The PINCER intervention is led by primary care pharmacists and pharmacy technicians. It involves searching GP clinical systems using computerised prescribing safety indicators to identify patients at risk from their medications and then acting to reduce the risk.

With funding and support from the Health Foundation and East Midlands AHSN, PINCER was rolled

out to more than 360 practices across the East Midlands between September 2015 and April 2017.

This involved:

- Using software to search clinical systems to identify patients at risk of hazardous prescribing
- Conducting clinical reviews of patient notes and medication
- Carrying out root cause analysis and providing feedback to the practice
- Establishing action planning to improve systems and reduce risk
- Scale up PINCER using a large-scale Quality Improvement Collaborative approach.

More than 2.9 million patient records were searched, and 21,617 cases of potentially hazardous prescribing were identified.

Preliminary results show that as a result of the study there was a significant reduction in hazardous

prescribing for indicators associated with gastrointestinal bleeding, heart failure and kidney injury.

A number of AHSNs have now also implemented PINCER in their regions, including Wessex AHSN who have introduced it to 235 GP practices and are an early adopter of PINCER 3.

PINCER is one of the Medicines Optimisation projects selected for national adoption and spread across the AHSN Network in 2018-2020.

A more detailed evaluation of the PINCER rollout linked with Hospital Episode Statistics and ONS mortality data is being undertaken as part of a £2.43 million NIHR Programme Grant for Applied Research (PRoTECT).

It is anticipated that use of PINCER will result in fewer medication-related hospital admissions and cost savings to the NHS 🇬🇧

Community pharmacist support for patients leaving 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.

This is what the Transfers of Care Around Medicine (TCAM) project aims to address.

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.

Original work in the North East showed that patients who see their community pharmacist after they've been in hospital are less likely to be readmitted and, if they are, will experience a shorter stay.

Many AHSNs, including Wessex and the West of England, have worked with trusts and Local Pharmaceutical Committees to help set up a secure electronic interface between the hospital IT systems and PharmOutcomes, the community pharmacy system used in their area. This has further enhanced TCAM by providing patient data quickly and seamlessly to their community pharmacist.

Wessex AHSN developed an awareness campaign to encourage people to seek help with their medicines, featuring a character called Mo in a series of animated films and accompanying poster resources for pharmacies. The films have been viewed almost 64,000 times.

Through our national implementation of TCAM in 2018-2020, each AHSN will support their local trusts to establish a TCAM pathway. This will enable all suitable patients to be referred to their community pharmacy or GP pharmacist where appropriate.

AHSNs have high level targets to improve the number of hospitals and discharges implementing TCAM referrals.

Nationally, with rapid adoption across all 15 AHSNs, TCAM has the potential to save £13.8 million, reduce length of stay by 56,704 days and achieve 1,004 fewer readmissions in 2018-19. In 2019-20, savings of £28.8 million are projected, based on a reduction in length of stay of 113,406 days and 2,007 fewer readmissions. 🇬🇧





PReCePT

The PReCePT project has so far prevented around seven cases of cerebral palsy in the West of England, representing potential lifetime healthcare savings in the region of £5 million – and substantially more when including loss of productivity and social care costs over a lifetime.

Babies born too early (preterm) are at an increased risk of dying in the first weeks of life, and those who survive may suffer from varying degrees of cerebral palsy, blindness, deafness or physical disabilities.

Antenatal magnesium sulphate (MgSO₄) given prior to preterm birth for fetal neuroprotection prevents cerebral palsy and reduces the combined risk of infant death or cerebral palsy.

Karen Luyt, a neonatologist at University Hospitals Bristol NHS Foundation Trust, noticed that the uptake of magnesium sulphate as a neuroprotector for preterm babies was very low in the UK. This was despite strong evidence of its efficacy in preventing cerebral palsy.

Karen approached the West of England AHSN with a proposal to address this. The case for change

was compelling, with the low cost and low risk of administering magnesium sulphate to eligible mothers reducing the risk.

Designed in partnership with patients and staff, PReCePT (Preventing Cerebral Palsy in PreTerm Labour) is a quality improvement project, designed to increase antenatal administration of magnesium sulphate to mothers during preterm labour.


The intervention was adopted by all five maternity units in the West of England. Projection modelling indicates that since the launch of the project in August 2014, phase one of PReCePT has prevented seven cases of cerebral palsy across the region.

Following the successful rollout of PReCePT to all five acute trusts in the West of England in 2016, the project is benefitting from £0.5 million in 'Scaling Up' funding

from the Health Foundation so that it can be introduced to a further 10 hospital trusts.

This evaluative study will compare the effectiveness of different levels of funding and QI involvement on magnesium sulphate uptake rates. This is a key element of important learning to understand how to maximise the effectiveness in the adoption and spread of good practice.

And now as part of our national adoption and spread programme, PReCePT will be implemented by all 15 AHSNs across England during 2018-2020.

Between 4,000 and 5,000 babies are born before 30 weeks' gestation in England per year and stand to benefit from full national roll-out of the PReCePT programme. Successful scaling up of PReCePT is likely to prevent several hundred cases of cerebral palsy per year 



Emergency Laparotomy Collaborative

Emergency laparotomy is a major surgical procedure, with 30,000 to 50,000 performed every year in the UK. However, around 15% of patients are reported to die within 30 days of surgery. Over 25% 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 established in 2015 to use a quality improvement (QI) approach to tackle this. The Collaborative brings together 28 hospitals and 24 NHS trusts across three AHSN regions: Kent Surrey Sussex; Wessex; and West of England.

The Collaborative has worked to improve standards of care for patients undergoing emergency laparotomy surgery, reduce mortality rates, complications and hospital length of stay, while encouraging a culture of collaboration and embedding QI skills to ensure sustainability of change.

This has involved the spread and adoption of the evidence-based Emergency Laparotomy Pathway Quality Improvement Care (ELPQuIC) bundle within the NHS trusts. The programme has brought together dozens of staff at collaborative learning events from across the trusts – from emergency departments, radiology, acute admission units, theatres, anaesthetics and intensive care.

Initial results show that the roll-out of the care bundle across 28 hospitals successfully reduced average length of stay by 1.3 days and reduced crude in-hospital 30-day mortality rate by 11%

when comparing baseline period with improvement period. In Kent Surrey Sussex alone, we estimate that 79 lives were saved during the 24-month programme.

A health economics analysis suggests every £1 spent will result in approximately £4.50 benefit to the wider health and social economy.

Emergency Laparotomy Collaborative has been identified as one of the highest impact programmes developed by all 15 AHSNs. Following this, we are now in advanced stages of planning for exporting this programme nationwide 🌐

ESCAPE-pain

Chronic joint pain, or osteoarthritis, affects one in five of the population over the age of 50, and one in two over 80. This condition causes considerable suffering and distress, and is a life-inhibiting disease.

Only a small proportion (about 5% of the eight to ten million sufferers in the UK) proceed to surgical intervention. Most are managed in the community, usually with painkillers, which are both unpopular with patients and potentially harmful. One in four GP appointments are estimated to be related to joint pain.

Through its member organisations, the Health Innovation Network (AHSN for South London) identified a need to be able to support patients with joint pain to self-manage their conditions in their localities, and provide education and exercise support, as recommended in NICE guidance.

Building on the work of ESCAPE-pain's originator, Professor Mike Hurley, who is an NHS Innovation Accelerator fellow, the Health Innovation Network is promoting the spread of ESCAPE-pain. This is an evidence-based, group rehabilitation programme for patients with knee and/or hip osteoarthritis. The AHSN provides training on the programme to physiotherapists or exercise professionals, who deliver it with the support of their local clinical commissioning group (CCG), hospital or community provider.

The ESCAPE-pain programme comprises 12 supervised sessions for a group of 10 to 12 participants who receive education and take part in a tailored exercise programme. The programme measures a range of clinical outcomes, and the

participants are signposted to services to help them continue to progress.

The ESCAPE-pain programme is now increasingly being delivered to people in leisure centres and other community venues and even workplaces, offering easier access away from clinical settings.

It is less costly than usual care plans, and generates savings in both primary and secondary care. The robust evidence for ESCAPE-pain shows that people achieve a marked improvement in mobility and pain reduction, and are better able to achieve the activities of everyday life. There is also a marked impact on mood based on anxiety and depression score improvements. Notably, results from the original trial have been replicated in clinical practice, which demonstrates the programme's efficacy.



ESCAPE-pain has already spread to over 70 sites nationally, benefitting more than 6,000 people. It will continue to spread across the country as the AHSN Network supports its wider spread during 2018-2020.

Arlene Rowe, an ESCAPE-pain participant, said: "Since being on the ESCAPE-pain programme, my life has changed massively. My first goal was just to stand straight. Now, I'm not hunched over, and I'm beginning to walk properly."

"I'm still stiff, I've still got arthritis, but what I don't have is the pain. Occasionally I get twinges, but nothing that makes me miserable. Being able to sleep at night is wonderful. I'm not afraid to go out, I'm not afraid to cross the road, I can get on and off the bus okay, and I can get on the train." 🌐





Wellbeing and Wealth

Serenity Integrated Mentoring (SIM)

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.

Recognising that this small number of repeat callers were responsible for such a significant proportion of the demand and that NHS staff alone were not equipped to manage some of the most extreme levels of behaviour, specialist, integrated mental health care and policing teams were formed to provide a unique blend of nursing care and behavioural management. These new teams work alongside the patients and encourage even the most challenging of clients towards more consistent and healthy coping strategies.

These SIM teams were developed by Paul Jennings, a former mental health sergeant from Hampshire Constabulary. Such was the success of this approach that in 2017, Paul left the police service to work full time for NHS England, leading the delivery of new teams all across England.

SIM carefully selects and trains police officers and police staff alongside their clinical

colleagues. Together they learn about the trauma and triggers that lead to high intensity behaviour, they discuss how best to manage risk and how to ensure that the service user does not keep on repeating the same high risk, high harm behaviour. It is demanding and intensive work but can bring significant breakthroughs in the lives of people whose behavioural risks are likely to result in them entering the criminal justice system or even worse, dead from accidental suicide.

Health economic analysis has demonstrated that this type of intensive crisis behaviour can cost police, ambulance, emergency departments and mental health services between £20,000 and £30,000 a year per patient. It is estimated that there are around 2,000-2,500 people across the UK who place these repeat demands upon services.

SIM intervention teams slowly reduce this pattern of high cost behaviour. Every patient is

different, but the best results so far have seen crisis calls and demand reduced by up to 90%.

Based on its success to date, in 2016 SIM was adopted by the NHS Innovation Accelerator programme, and in 2018 it was selected for national scaling and spread across the AHSN Network.

AHSNs across the country will partner with mental health trusts and police services to roll out the SIM model. Nine mental health trusts have already launched teams, another 13 are in the process of setting up a team and a further 12 are actively considering starting. This accounts for over half of mental health trusts across the country. In addition, SIM is also live in the Netherlands and is being planned in Sweden, USA, New Zealand and Australia.

More information about SIM can be found at www.highintensitynetwork.org

AHSN Atlas of Solutions in Healthcare

The AHSN Atlas is an online resource that shares some of the very best examples of how AHSNs are spreading high impact innovation across the health and care system. Here are some of our most successful solutions...

Medic Bleep

The Medic Bleep app is a clever alternative to the traditional pager for hospital staff.

Many hospitals rely on a pager system. However the communication method is one-way, the recipient is unaware who is bleeping, why, or the level of urgency. Work is interrupted, time is wasted, and prioritisation is difficult.

The Eastern AHSN is working with Medic Bleep to provide advice

and support on adoption of their innovation, including guidance on appropriate evaluation. The overall aim of the app is to improve patient safety and release time for staff to care for patients.

A time and motion study showed a statistically significant improvement when using medic bleep instead of a traditional pager. It saved nurses 21 minutes and junior doctors 48 minutes per shift.

www.bit.ly/bleep-ahsn

Silhouette®: 3D wound imaging

It is vital that all patients with diabetic foot ulcers receive regular treatment and check-ups. These generally take place in hospital outpatient clinics, placing a severe strain on the service and patients might travel long distances for appointments.

East Midlands AHSN worked with Entec Health and Aranz Medical to spread Silhouette®, a new 3D wound imaging and information system, which means routine diabetic foot ulcer treatment can now be delivered in the community.

David Hawkins, a patient from Ripley, said: "Being able to have my check-ups at my local clinic is great. I have less distance to travel and it makes getting to appointments much easier."

www.bit.ly/silhouette-ahsn

Atrial Fibrillation (AF) Data Landscape Tool

The AF Data Landscape Tool aims to reduce AF-related strokes by 365 per year – that's one stroke a day. It was initially created at Health Innovation Manchester and then further developed for national use and launched by Imperial College Health Partners.

It is a unique tool bringing together all publicly available data about AF prevalence, stroke incidence and anticoagulant treatment, from datasets for every Clinical Commissioning Group (CCG) in England, in an easy-to-use dashboard format.

Each CCG has timely and accurate access to their own data and can easily compare their local information with national, regional and RightCare matched averages. The tool provides insights to enable commissioners to better direct resources where they are most needed.

The tool has been adopted by seven of the 15 AHSNs, and it has wide applicability across the UK. It is also part of both London and Manchester-wide AF improvement programmes, in collaboration with Public Health England's (PHE) initiative, to improve AF management and reduce the number of avoidable AF-related strokes.

www.bit.ly/AF-landscape-ahsn
www.bit.ly/af-ichp

Graduates into Health

The NHS struggles with entry level recruitment, while talented graduates aren't always aware of non-clinical career opportunities. That's why the Health Innovation Network set up 'Graduates into Health' (GiH) to build capacity and support NHS providers with recruitment into business function teams, such as HR, procurement and IT.

GiH teamed up with the Graduate Management Trainee Scheme to recruit talented graduates from their 20,000 annual pool that don't make it on to one of their scarce 200 places.

GiH has recruited over 80 graduates across 30 trusts, commissioners, GP surgeries, third sector, and system wide organisations, offering an innovative time saving service. The programme has a 96% retention rate and saved over £340,300 in staff time.

www.bit.ly/GiH-ahsn

Improving patient involvement in diabetes management

Good diabetes management and improving lifestyle factors such as weight and activity levels can reduce the risk of what can be devastating and costly complications. However, while structured education courses can help people to manage diabetes, attendance rates are very low.

The North West London CCGs in partnership with Imperial College Health Partners, who carried out an independent evaluation, are working with OurPath, Oviva and Changing Health to provide digital solutions for patients with diabetes to improve self-management.

The results demonstrate impressive levels of patient adherence and engagement, with reductions for all key indicators such as weight and blood glucose levels.

The three companies have been supported by the DigitalHealth.London Accelerator programme, a partnership between London's three AHSNs, along with MedCity, CW+, and Guy's and St Thomas' Charity.

www.bit.ly/diabetes-ahsn

House of Memories



House of Memories

House of Memories is a pioneering project making a real difference to people living with dementia, their carers, families and communities. Developed by National Museums Liverpool, it has now spread UK wide with help from the Innovation Agency, the AHSN for the North West Coast.

It brings together an innovative dementia awareness training programme and an app called *My House of Memories*. Originally developed for health and social care staff, House of Memories has been expanded for family and carers. It uses the power of museum objects to help build positive communication between carers and people living with dementia.

The app provides access to hundreds of fantastic social history objects from museum collections. It is designed to be intuitive and easy to use, featuring images, videos and audio to stir memories and stimulate conversations. The app was developed by Damibu, whose MD, Dave Burrows, is now an NHS Innovation Accelerator Fellow.

User involvement has been key to the success of the project, and was a feature from initial scoping through to co-design and testing.

www.bit.ly/memories-ahsn

Taking time to listen and learn: medication reviews

Clinical commissioning groups (CCGs) have identified funding and resources as barriers to making sustainable improvements to problematic 'polypharmacy' or overuse of multiple medicines.

Kent Surrey Sussex AHSN supported a project to examine the benefits of level 3 medication reviews through a seven month pilot with Brighton and Hove CCG.

Holistic, level 3 'gold standard' face to face medication reviews were carried out with residents and patients in care homes and other care settings, with a focus on listening and shared decision making. The reviews were carried out by an experienced pharmacist and pharmacy technician, working closely with GPs, hospital colleagues and Age UK, and aimed to improve patient outcomes and quality of life.

In addition, this approach was shown to reduce hospital admissions and was well received by patients and carers, while offering savings to CCG prescribing budgets. The findings will now be used to inform similar work in a different locality, at the end of which the AHSN will produce a toolkit to help other organisations implement similar projects locally.

www.bit.ly/atlas-ahsn

Limiting patient injury from AKI

The Patient Safety Collaborative North East and North Cumbria is helping to spread an effective approach to recognising and promptly treating Acute Kidney Injury (AKI).

A team at South Tees Hospitals NHS Foundation Trust in Middlesbrough first developed the programme, resulting in a sustained reduction (36%) in AKI cases within surgical wards.

AKI describes when a person suffers from a sudden reduction

in kidney function. In the UK, up to 100,000 deaths each year in hospital are associated with AKI. Up to 30% of these could be prevented with the right care.

The South Tees AKI programme includes a national electronic alerting system, an intensive trust-wide awareness campaign, education workshops, teaching package, clinician guidelines and a clinical quality assurance platform to track patient level co-morbidities.

The programme is now being rolled out to trusts across the North East and the rest of the country.

www.bit.ly/AKI-ahsn

Improving hydration in care homes

Fewer residents are suffering urinary tract infections (UTIs) following the introduction of a hydration programme in care homes, led by the Oxford Patient Safety Collaborative.

UTIs are closely associated with dehydration. The project encouraged residents to drink more fluids with the aim that this would lead to fewer UTIs requiring medication or hospital admission. This approach involved introducing structured drinks rounds seven times a day, designed and delivered by care home staff.

The initial focus was in four care homes with higher than average UTI admission to hospital rates. To date the overall reduction of hospital admissions due to a UTI is 61%. The number of UTIs requiring antibiotics has also fallen from an average of one every nine days to one every 52 days.

www.bit.ly/UTI-ahsn

Life QI

Life QI is an online platform that assists frontline health and social care staff in running quality improvement (QI) projects. It was originally developed as part of the South West Patient Safety Collaborative in partnership with the South West AHSN and SeeData Ltd.

Life QI supports teams to plan, monitor and report the progress of their improvement projects, as well as connect with other members of the quality improvement community, facilitating collaboration and shared learning.

Following its success in the South West region, the platform has been further developed and enhanced, giving access to the member organisations of all 15 AHSNs across the country, and is being used internationally too across 28 countries.

As a result of AHSN support, the number of organisations using Life QI in England has grown from 375 to 1,400, with 10,100 individual users running 5,700 quality improvement projects.

www.bit.ly/life-ahsn

End of life care education

UCLPartners have developed innovative educational resources for teaching End of Life Care (EOLC) to non-specialist staff across all health and care settings.

The aim is to improve conversations between staff and patients in their last weeks and days of life, so that more people get to die in their preferred place and unnecessary hospital admissions are avoided.

Each set of materials includes a short film, teaching slides and activities. The first film, *Milestones*, depicts a patient's experience in an acute hospital, while *You Matter* shows the experience of a man dying in his own home.

The materials use the films to stimulate a reflective session, allowing staff to explore what is important for people at the end of their life.

The resources have been highly rated by trainers, and learners have reported an increase in confidence as well as a positive impact on their practice.

www.bit.ly/EOLC-ahsn

Organisational change roadmap

Wessex AHSN have developed a one-page visual roadmap to help those involved in supporting or leading organisational change in any clinical area.

Based on established quality improvement methodology, the roadmap has been developed to offer an 'at a glance' checklist, and outlines useful areas to consider when planning or undertaking improvement work. It comprises 12 steps iterating the central elements required for successful change.

Alison Griffiths, roadmap author and Wessex AHSN's programme manager for mental health, said: "The improvement journey is rarely smooth, and knowing where to begin can feel daunting. However, a supportive approach and perseverance can have a huge impact on service users and their family, and on staff, by reducing variation whilst promoting better and evolving care."

www.bit.ly/roadmap-ahsn

SPACE: Safer Provision and Caring Excellence

Most care home residents have high support needs, such as dementia, confusion, challenging behaviour, incontinence, hearing or visual impairments or reduced mobility - or a combination of these needs.

The care home sector is also characterised by frequent policy and regulatory changes, heavy workloads, high staff turnover and difficulty recruiting and retaining competent staff.

These factors can make it challenging for positive safety practices to be cascaded and embedded within the organisational culture.

Led by the West Midlands Patient Safety Collaborative, SPACE is an innovative improvement programme working with care homes across the region. It aims to improve safety culture and reduce the incidence of adverse safety events.

Through SPACE, care home staff are developing service improvement skills, while the Collaborative is supporting care homes to introduce changes to practice.

A recent Care Quality Commission (CQC) inspection report highlighted the valuable contribution played by the SPACE in helping Walsall's community services achieve a 'good' rating.

www.bit.ly/space-ahsn

Sharing the NEWS

All too often healthcare professionals don't speak the same 'language'. This can cause problems at the handovers of care when patients are passed from one healthcare setting to another. Inconsistency can lead to delays in detecting and treating seriously ill patients who are deteriorating rapidly.

Since 2015, the West of England Patient Safety Collaborative (PSC) has been working on a major programme to introduce the National Early Warning Score (NEWS) at every handover of patient care - primary care, ambulance, hospital, community and mental health. NEWS was developed by the Royal College of Physicians and checks six vital signs.

Building on the success of this work in the West, the National Quality Board is encouraging the adoption of NEWS across all NHS acute care. NEWS and NEWS2 are now fully endorsed by NHS England and NHS Improvement.

www.bit.ly/NEWS-ahsn

SPACE: Safer Provision and Caring Excellence

The Faecal Calprotectin Pathway

The new Faecal Calprotectin Pathway helps GPs make the difficult distinction between irritable bowel syndrome (IBS) and inflammatory bowel disease (IBD). Because distinguishing IBS from IBD is tricky, as many as 19 out of 20 patients are unnecessarily referred to secondary care, while diagnosis for other patients is delayed.

The pathway was introduced by Dr James Turvill, Consultant Gastroenterologist at York Teaching Hospitals NHS Foundation Trust.

The Yorkshire & Humber AHSN supported its spread by funding an economic impact analysis and creating implementation packs for trusts, Clinical Commissioning Groups (CCGs) and primary care. A number of AHSNs across the country are now working to implement the pathway in their areas.

Use of the pathway in one region has resulted in a 40-57% reduction in new hospital outpatients' appointments, with a 21-50% reduction in colonoscopies. Projected savings to each CCG using the pathway are up to £100,000 a year.

www.bit.ly/fcp-ahsn

For more on these and many other AHSN supported innovations, visit atlas.ahsnnetwork.com



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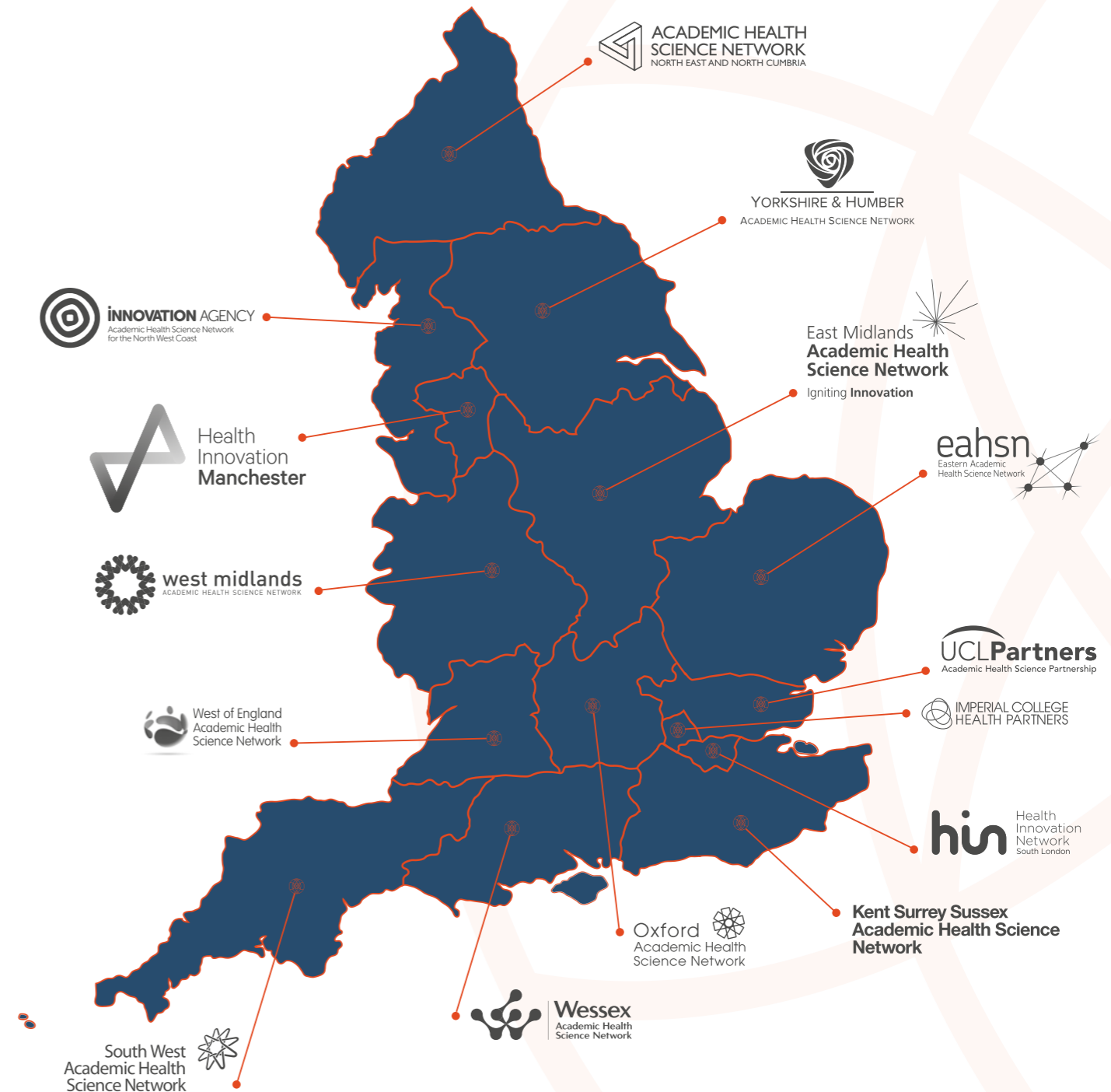
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