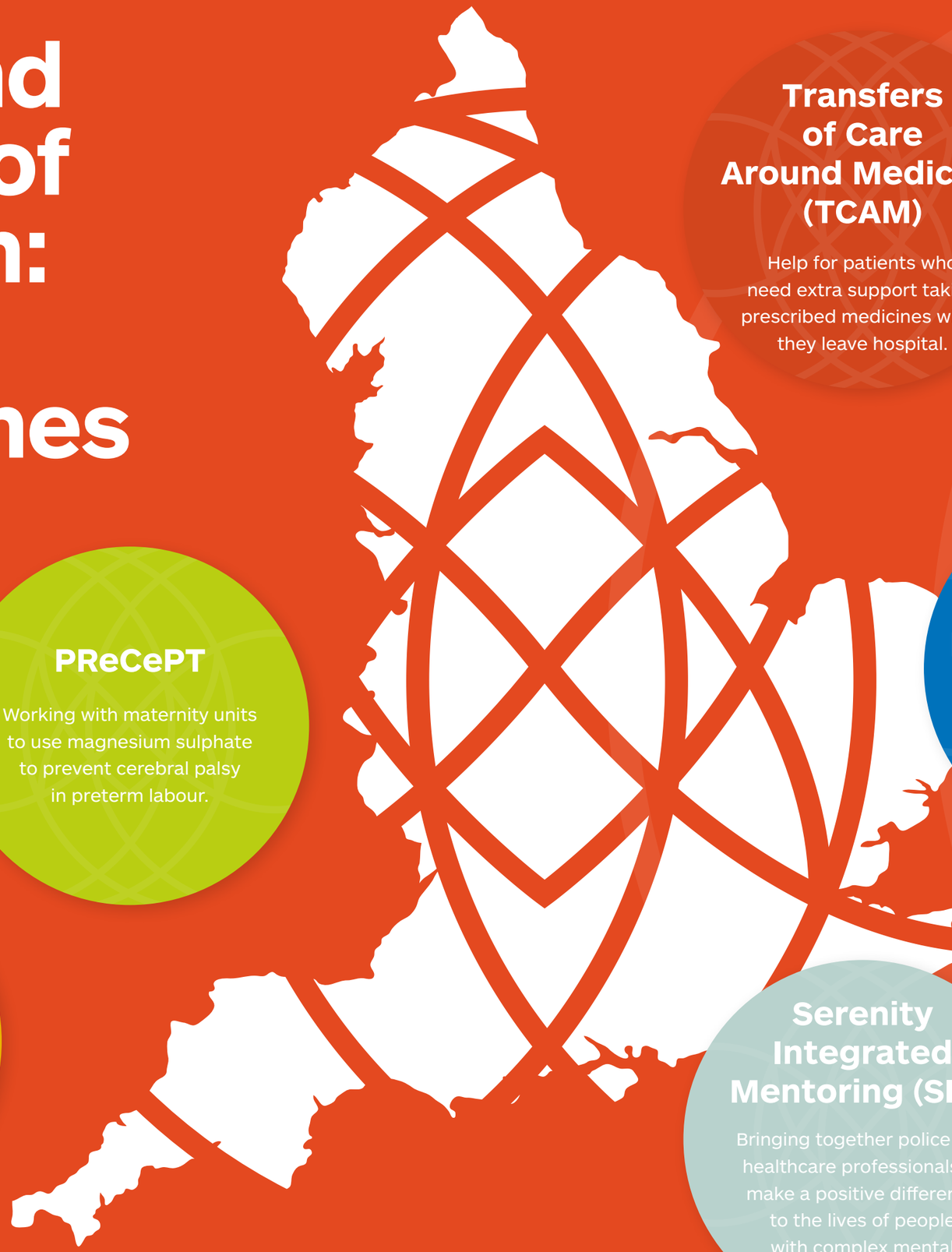
Spread and adoption of innovation: national programmes

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



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.

PReCePT

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

Emergency Laparotomy Collaborative

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

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 ($MgSO_4$) 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."

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