

Kent Surrey Sussex
Academic Health Science
Network

Annual review



2015/16

Hitting our objectives

Over **250,000** patients have benefited from our service improvement work to date. **10%** of the Kent Surrey Sussex population will have benefited by **2018**

In 2015 the Clinical Trials Unit at the University of Surrey was awarded provisional registration by the UK Clinical Research Collaboration – a first for our region

200 companies benefited from our engagement with industry in **2015/16**

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Better health, better care, better value

We support our members in Kent, Surrey and Sussex to improve the health and care of older people, accelerate the Five Year Forward View's vision for sustainable new models of care, and facilitate industry and voluntary sector engagement to help meet these ambitions. We are on track to deliver more than £100m of social benefit by 2020.

Disruptive innovation

Our consortium building work with the NHS, University of Surrey and colleagues in Southern Denmark has contributed to the success of an Innovate UK Internet of

Things test bed bid. This is bringing £5million of inward investment over the next two years. We are working with colleagues in Europe's only 5G innovation centre, based in the University of Surrey, to bring game changing disruptive innovation to health and care. The international significance of the project has been recognised by the G7 countries ICT committee.

Wider network

Whilst doubling our NHS membership, we have developed closer links with other non-NHS partners, such as Age UK.

With our help, their care co-ordinator service is being introduced faster in Kent, Surrey and Sussex than any other region in the UK.

Our approach to industry engagement is attracting significant interest among small and medium size enterprises (SMEs) and larger companies, as well as across the AHSN Network where we now work in partnership on this with fellow AHSNs.

With a portfolio that has expanded significantly since 2013, our annual review illustrates our impact through case studies drawn from across our workstreams.

The future

AHSNs were awarded a five year licence and funding by NHS England in 2013 and a process is underway to relicence AHSNs with further central funding from national bodies.

In 2015 the Accelerated Access Review began with the aim of accelerating access to innovative drugs, devices and diagnostics for NHS patients. Its interim report stated the need for "developing the AHSNs as part of steps to seamlessly manage the innovation pathway."

Successful test bed bid brings

£5m

investment over next 2 years



Our winter Expo, summer partnership day and collaborative events have connected over

1,500

colleagues from across the public and private sectors



Our paying membership numbers are growing – almost doubling in

2015

81%

of our stakeholders would recommend working with us

77%

of our stakeholders say they have a good working relationship with us

We're seen as effective when it comes to delivery -

74%

of our stakeholders believe we will deliver our priorities

Spreading innovation, improving health, driving economic growth

Our vision is to spread health and care innovation faster in Kent, Surrey and Sussex. This involves bringing together organisations and individuals to improve health, care and value and contribute to a vibrant local economy.

We support a sustainable network to identify and adopt practice worth spreading, and help accelerate healthcare innovation.

- We are catalysts for the spread of innovation at pace and scale - improving health, generating economic growth and helping facilitate change across whole health and social care economies
- We connect regional networks of NHS and academic organisations, local authorities, the third sector and industry - responding to the diverse needs of our patients and populations through partnership and collaboration
- We create the right environment for relevant industries to work with the health and social care system.

Work programmes

We deliver work which impacts on regional and national priorities:

Living Well For Longer – launched in 2015 - reduces unnecessary hospital admissions, enhances self-management, builds capability in care home staff and aligns with public health strategies and early intervention.

System leadership support – launched in 2016 – strengthens collective leadership and accelerates the introduction of sustainable new care models, to deliver greater change at faster pace.

Industry engagement – launched in 2013 – bridges the gap between industry and the NHS, enabling the best new innovations to spread further and faster – benefiting more people, more quickly.

Patient Safety Collaborative - launched in 2014 - helps all health and care providers in the region, as well as those who commission services, to deliver the safest care they can and continue to improve.

Service quality improvement programmes - launched in 2011 - enable clinicians to work together to reduce variation and to spread existing best practice and the best new innovations.

Our team

We are an ambitious, committed and dynamic team.

Every member of our team has something unique to offer and makes a positive impact for our members and partners in Kent, Surrey and Sussex - and beyond.

We invest in our people and their futures, doing all we can to make KSS AHSN a great place to work.

As an employer we believe in fostering talent and supporting career development. We value and welcome equality and diversity and promote and encourage a good work/home life balance.

We've undertaken our first staff survey this year - we had a 100% response rate - and are now involving our people in creating change arising from the feedback to make KSS AHSN an even better place to work.

KSS AHSN programmes and enabling activity		Projects
Living Well For Longer		Polypharmacy
		End of Life
		Hydration
		Age UK
Industry engagement		Innovation surgeries
		Surgery +
		Test bed (market access)
System Leadership Support (joint programme with Health Education Kent Surrey Sussex and Kent Surrey Sussex Leadership Collaborative)		Whole System Support (using Measures, Leadership, Modeling, Simulation)
		Community Pharmacy
		Joint projects with Kent Surrey Sussex Leadership Collaborative
Quality and safety improvement	Patient Safety Collaborative	Acute Kidney Injury
		Sepsis
		Mental Health
		Leadership & Culture
		Measurement
		Pressure Damage
		Safe Discharge
		Medication Errors
	Enhanced Recovery	Emergency Laparotomy
		Elective Pathways measurement
	Respiratory	COPD
		Community Acquired Pneumonia
		Acute NIV
	Enhancing Quality	Asthma
		Heart Failure
		Atrial Fibrillation
Diabetes Hypoglycaemia Pathway		
		Fractured Neck of Femur

Emergency Laparotomy Collaborative – saving 1000 lives in two years

Case study

Emergency laparotomy is a difficult surgical procedure. It carries a high risk of the patient dying within 30 days of surgery. An initial improvement project that focused on standardising Emergency Laparotomy patient care at the Royal Surrey County Hospital NHS Foundation Trust saw a 25% reduction in the mortality rate. We're now scaling up their best practice across hospitals in the south of England through the Emergency Laparotomy Collaborative.

Spreading best practice

Emergency laparotomy is an operation usually performed on patients with acute abdominal problems, such as obstruction or perforation of the bowel. Around 80,000 emergency laparotomy procedures are carried out in the UK each year.

Figures in the UK are similar to the USA and Denmark: the risk of the patient dying within 30 days of the operation is about 15%. Higher mortality rates are found in the elderly and patients with complex co-existing medical problems.

Working with West of England and Wessex AHSNs, we are accelerating the spread of a pathway that aims

to improve standards of care for patients undergoing this surgery, reducing mortality rates, complications, and length of stay in hospital.

This is done through a variety of measures, including an Early Warning Score to identify patients most at risk of deterioration; a Sepsis screening tool to identify and treat patients; and a target of definitive surgery within six hours of the decision to operate in urgent cases.

By standardising the care received by all patients undergoing emergency laparotomy, providers can dramatically reduce the risks associated with this type of surgery.

The three AHSN regions, have recruited 24 trusts (covering 28 hospitals) to implement the Emergency Laparotomy Collaborative intervention.

A range of clinical measures have been put in place, allowing those taking part to easily share progress and learning. Individual trusts are able to analyse their National Emergency Laparotomy Audit metrics, using measurement for improvement. An online dashboard allows trusts and hospitals to compare their performance against others and identify areas of best practice.

There has been much interest in the Emergency Laparotomy Collaborative programme amongst the Royal College of Anaesthetists, Royal College of Surgeons, other trusts and AHSNs and the programme continues to develop at pace.

The risk of patients dying within 30 days of the operation is

15%



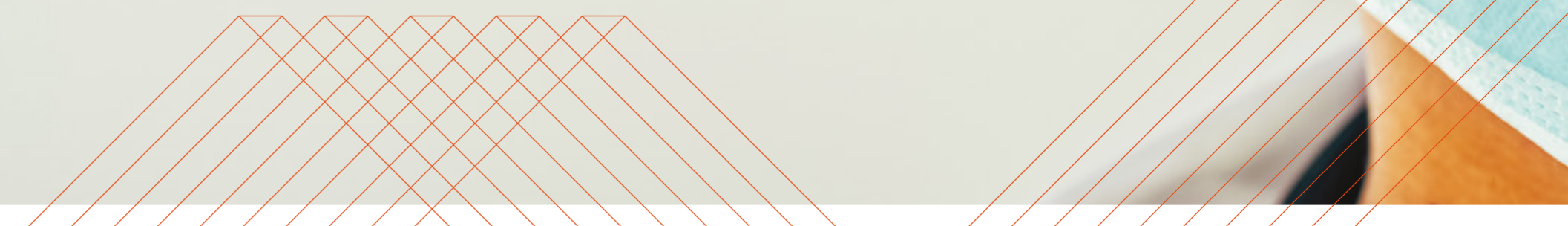
An initial project saw a

25%

reduction in the crude mortality rate

28

hospitals have now been recruited to implement the ELC intervention





Innovation surgeries – bridging the gap between industry and the NHS

Taking advantage of the latest technology is crucial, helping improve health outcomes and the sustainability of the health and social care system as a whole.

We have developed in 2015 what is now a trusted and valued, end-to-end process to help industry understand the health and care system and explain how to avoid or address the challenges it holds.

Spreading innovation faster

The quality of care provided to patients depends – almost every time – on technology.

From the digital thermometer or patient records to robotic surgery and genomic medicine, technology is at the heart of modern healthcare.

As well as the on-going challenge for health and social care staff to know what credible and affordable technologies are available, there's also a challenge for product developers to know what's needed.

We engage with industry and the NHS to bridge the gap between the sectors.

Companies of any size and with any technologies can get involved. An initial assessment looks at how close the product is to market and tests the credibility of the proposal.

Once this has been established there are four key routes:

- **Innovation surgeries** a confidential, 60 minute discussion to help companies with their market access strategy and improve their value proposition.
- **Surgery+** typically a half-day session where companies are challenged to ensure their approach is realistic and ready to be put in front of NHS clinicians and purchasers.
- **Test beds** give an opportunity to work with the relevant health and social care partners to understand in detail the practical issues faced by organisations wishing to adopt the technology.

- **Innovation Exchange** once companies have a strong, validated business case and strategy we share details of the specific product across the national AHSN Network. This can be a gateway to faster spread and adoption of the new technology, which means more patients benefit more quickly.

By bridging the gap between industry and the health and care organisations we can help companies develop an informed approach to working with the NHS. We help our members by filtering out offerings that are not yet ready for market, and highlighting products and services more likely to meet their needs.

Investing in innovation

Beautiful Information provides unique real-time information to NHS trusts to help them plan and resource clinical services to meet hourly fluctuations in patient demand. It began from within the Information Directorate at East Kent Hospitals University NHS Foundation Trust and now includes links with a number of private and academic partners.

KSS AHSN has supported Beautiful Information Ltd with a business loan, enabling the service to develop, grow and add more value faster.

“challenging, stimulating and provided real actionable feedback”

Founder, medical device company

“helped us define a strategy to approach the NHS, and stopped us from going down dead-ends”

Entrepreneur and CEO digital health company

“invaluable in helping us to develop our insights, challenge our assumptions and highlight the areas to focus on”

Director, specialist pharmacy

“incredibly useful”

CEO, digital health company



200

companies supported to engage more effectively with the health and care sector

More than **100**

companies benefited from our innovation surgeries

12

companies involved in local test beds

Connecting 5G technologies for next generation dementia care

Case study

A groundbreaking project, which has attracted £5m of external funding, is investigating the way new technology could be used to deal with the healthcare needs of people aged 65 and over.

Adoption and diffusion of innovation and research

The size of our over 65 population is projected to rise by 33% in the next 15 years, whilst our working age population will increase by just 3% in the same period.

With so many people living for longer it's clear that the NHS will need to address the way healthcare is provided. KSS AHSN support for this project helps our partners to be at the forefront of work to maximise the benefits of new technology.

The starting point for the project is the fact that telecommunication companies are developing a new 5G mobile network, which will bring wider coverage and much faster speeds.

One of the benefits of this enhanced network will be the ability to create physical objects embedded with electronics, software, sensors and network connectivity, allowing the objects to collect and share data – known as the Internet of Things.

KSS AHSN successfully brought together a consortium, including Surrey and Borders Partnership NHS Foundation Trust, the University of Surrey, the Region of Southern Denmark, Public Intelligence (Denmark), health technology providers and NHS clinical commissioning groups, to make Surrey an official “test bed” for new innovative healthcare.

Attracting £5m funding from Innovate UK, the two-year project will create a ‘Living Lab’ at the University of Surrey. This will involve citizens and the public and private sectors to harness the possibilities of modern wireless technology for the health and social care sector.


Known as Technology Integrated Health Management for Dementia, it will look to help people living with dementia to live in their own homes for longer. Individuals and their carers will be provided with sensors, wearables, monitors and other devices, which will combine into an ‘Internet of Things’ to monitor their health at home.

A key output from the project will be the development of a process for enabling 5G devices to connect and interact together. This will have huge commercial potential beyond the significant impact it could bring to future healthcare technology.

The project will provide data and service interoperability standards and best practices for integrating heterogeneous healthcare technologies.

The project will also provide data analysis and will create prediction models by analysing real-time health care monitoring and observation data and combining it with patient records, historical data and expert knowledge.

Our bid attracted
£5m
funding from Innovate UK



We've partnered with a range of organisations, including

**10 CCGs
& 6 SMEs**



The project is one of only eight internationally significant projects welcomed at the **2016 G7 ICT** summit in Japan.





Integrated care pilots

– KSS AHSN as catalyst for change in service delivery

KSS AHSN's experience in sharing best practice and driving innovation makes us an ideal partner for Age UK who plan to establish a new model of care for older people with long term conditions. We have been instrumental in developing seven rollout sites for this practice worth spreading from Cornwall.

Addressing the health and wellbeing gap

Our Living Well For Longer programme (LWFL) is about ensuring that older people have the treatment and support they need at the right place and at the right time.

Currently care takes place in hospital too often because of the absence of alternatives. Finding effective and affordable new models of care which address the resulting implications for workforce and finance is a key element within Sustainability and Transformation Plans.

So when Age UK approached us for help in rolling out its Integrated Care Pilots (ICPs), which look to create the conditions that enable older people to stay out of hospital, we were keen to get involved.

The project places Age UK staff and volunteers as members of primary care led multi-disciplinary teams, developing tailored care plans and providing essential support to the local community.

Our team has engaged with CCG leaders, clinical leads, social care and others, playing a critical role in enabling the range of partners to come together and develop the pilots.

To date we have enabled projects to move forward in Ashford and in Guildford, with mobilisation planned in 2016 in two other KSS localities and a pipeline of three other localities looking to proceed in 2017.

Five hundred older people will benefit from this new way of working at each site, with improvements in health and wellbeing outcomes as well as improved quality of care and support.

The project will also reduce cost pressures in the local health and social care economies - Age UK's analysis of cost benefit suggests that £4 of costs are avoided for every £1 spent on the project.

Age UK interim results show:

31%
reduction in all hospital admissions

26%
reduction in non-elective hospital admissions

20%
average improvement in wellbeing





Improving care for patients with acute kidney injury

We believe that the number of cases of AKI acquired in hospital can be reduced, saving lives and improving patient outcomes.

Acute Kidney Injury (AKI) is not a new problem and can complicate care of patients in primary care and in any hospital speciality. It may be seen in up to 20% of all acute admissions to hospital and a proportion of cases will develop after admission. Analysis of hospital statistics suggests AKI is associated with up to 30% mortality at 30 days.

Our aim is to reduce avoidable harm associated with AKI. In June 2015 we published the KSS PSC AKI shared guidance to improve access to best practice.

We are working with trusts in Kent, Surrey and Sussex to improve the identification and recording of cases of AKI. Having data on a large scale and clinical collaboration across a number of trusts gives best practice and innovation the chance to flourish.

We have also agreed process measures with frontline clinicians that reflect delivery of good care.

This means that health professionals in Kent, Surrey and Sussex are better equipped to prevent potential AKI or care for affected patients, and that more patients benefit more quickly.

We expect that our work will lead to more widespread delivery of best practice and reduction in rates of progression of AKI in hospital and the mortality rate for AKI patients.

We will also see an increase in the percentage of patients with AKI whose discharge information is of high quality, improving their outcomes.

National AKI cluster
All 15 Patient Safety Collaboratives in England working on similar priorities have been grouped into clusters. These clusters develop local improvement metrics, share learning, develop expertise, build on the evidence base and share the outputs of the work with the wider NHS. Kent Surrey Sussex Patient Safety Collaborative is leading the work in the Acute Kidney Injury national cluster.

"I was really impressed at the leadership which Kent, Surrey and Sussex Patient Safety Collaborative have shown in developing a common approach to measuring improvement in Acute Kidney Injury. It will be a real asset to have agreement on common process and outcome metrics across all the main interested parties. This is exactly what I had hoped for, for Patient Safety Collaboratives."

Prof Sir Norman Williams, Chair of the National Patient Safety Collaborative Board



AKI may be seen in up to **20%** of all acute admissions to hospital

90% of trusts are now using the national formula to generate AKI alerts

We carried out two learning events for more than **160** health care professionals

AHSNs: “the engine for innovation in the NHS”

Professor Sir Bruce Keogh, Medical Director, NHS England

We are one of 15 Academic Health Science Networks (AHSNs). The network covers the whole of England to spread innovation, improve health and generate economic growth.

AHSNs connect health and social care, industry, researchers and the voluntary sector. They create partnerships, enable collaboration and respond to the needs of patients and populations.

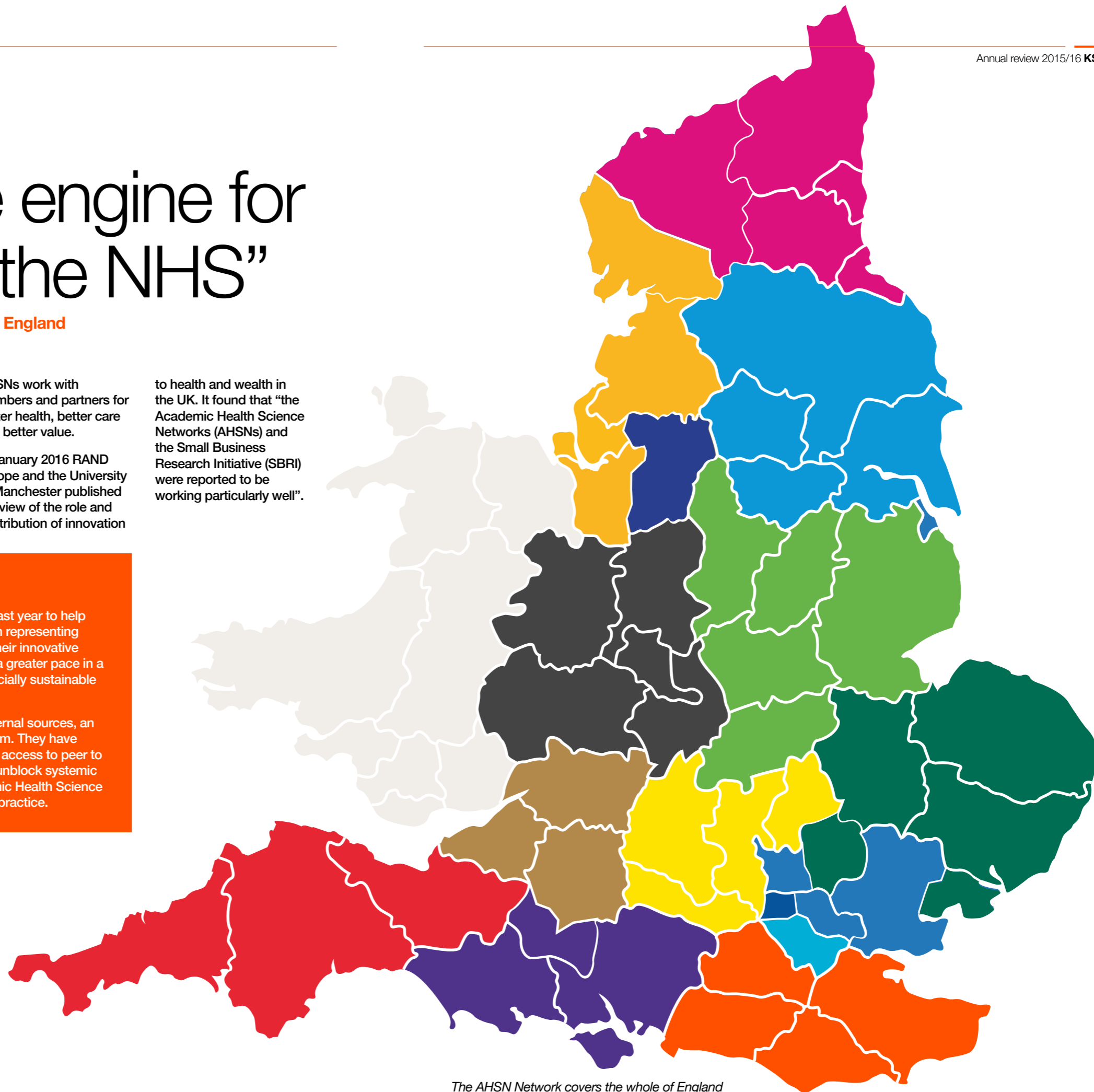
AHSNs work with members and partners for better health, better care and better value. In January 2016 RAND Europe and the University of Manchester published a review of the role and contribution of innovation

to health and wealth in the UK. It found that “the Academic Health Science Networks (AHSNs) and the Small Business Research Initiative (SBRI) were reported to be working particularly well”.

Innovation adoption

The NHS Innovation Accelerator (NIA) programme launched last year to help introduce new innovations into the NHS. 17 NIA Fellows, each representing an evidence-based innovation, are being supported to take their innovative technology or service to an increasing number of patients at a greater pace in a bid to improve patient care - and help put the NHS on a financially sustainable footing.

The 17 Fellows have, to date, raised more than £8m from external sources, an eight fold increase of the Accelerator's initial investment of £1m. They have received mentorship by high profile leaders in healthcare and access to peer support and learning events. NHS England has helped unblock systemic barriers to spreading innovation and the country's 15 Academic Health Science Networks have assisted in getting them adopted into clinical practice.



The AHSN Network covers the whole of England

Supporting members

We achieve more together.

We offer services, support and opportunities to help our partners meet their challenges and deliver better health, better care and better value. For members this includes a core package of access to KSS AHSN collaboration and networking events, news and support.

Members can also benefit from our service improvement portfolio. Industry innovators benefit from bespoke support to improve care through wider spread and adoption of proven new products, technologies and services.

We support researchers and colleagues in the education sector to build stronger connections with health and social care and industry.

We gratefully acknowledge the support of:

Ashford and St Peter's Hospitals NHS Foundation Trust

Brighton and Sussex University Hospitals NHS Trust

CSH Surrey Ltd

East Kent Hospitals University NHS Foundation Trust

East Sussex Healthcare NHS Trust

First Community Health and Care

Frimley Health NHS Foundation Trust

Kent Community Health NHS Foundation Trust

Maidstone and Tunbridge Wells NHS Trust

NHS Ashford Clinical Commissioning Group

NHS Brighton and Hove Clinical Commissioning Group

NHS Canterbury and Coastal Clinical Commissioning Group

NHS Coastal West Sussex Clinical Commissioning Group

NHS Crawley Clinical Commissioning Group

NHS Dartford Gravesham and Swanley Clinical Commissioning Group

NHS East Surrey Clinical Commissioning Group

NHS Guildford and Waverly Clinical Commissioning Group

NHS Hastings and Rother Clinical Commissioning Group

NHS High Weald Lewes Havens Clinical Commissioning Group

NHS Horsham and Mid Sussex Clinical Commissioning Group

NHS Medway Clinical Commissioning Group

NHS North West Surrey Clinical Commissioning Group

NHS South Kent Coast Clinical Commissioning Group

NHS Surrey Downs Clinical Commissioning Group

NHS Swale Clinical Commissioning Group

NHS West Kent Clinical Commissioning Group

Royal Surrey County Hospital NHS Foundation Trust

South East Coast Ambulance Service NHS Foundation Trust

Surrey and Borders Partnership NHS Foundation Trust

Surrey and Sussex Healthcare NHS Trust

Sussex Community NHS Foundation Trust

Sussex Partnership NHS Foundation Trust

Western Sussex Hospitals NHS Foundation Trust

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For more information, please contact us via enquiries@kssahsn.net or visit our website www.kssahsn.net




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