Kent Surrey Sussex Academic Health Science Network



Towards consistently high quality care and a vibrant local economy

2013/14 review



Supporting our members

Pressure on health and social care services has never been greater. Rising demand and funding constraints affect us all. KSS AHSN is proud to offer our members services, support and opportunities to help them meet these challenges.

We have tailored packages of support and services for members in each sector.

KSS AHSN helps NHS members - providers and commissioners - to improve performance by achieving consistent and high quality care. Benefits include subsidised access to Enhancing Quality and Recovery programmes, the respiratory network and our innovation development services.

Industry members benefit from bespoke support for high potential innovations to improve care through wider spread and adoption. In addition to the expertise of clinical networks, we provide opportunities to understand clinical needs and support for funding bids.

Membership enhances research capability by facilitating connections with health and social care and industry. Building wider partnerships supports research ambitions and creation of a clinical trials unit by 2015. We promote the creation of joint appointments between universities and the NHS to support greater participation in research and faster spread and adoption of evidence based best practice.

Call us on 0300 303 8660 to find out more about membership benefits

2013/14 review

a year of progress towards a sustainable network focused on healthcare innovation and Kent, Surrey and Sussex delivering consistently high quality care within a vibrant local economy

Contents

5
6
10
16
26
32
34

Welcome

We are

- speeding up the spread of existing best practice
- accelerating the identification and adoption of the best new innovations
- working to get the best research adopted in frontline service delivery.

This review gives you a flavour of what has been achieved so far and, together with our Business Plan, how we will build on it. If it inspires you to get involved, please do get in touch; we achieve more together.

Together with our members and partners, our services save lives, increase the number of people getting the best healthcare and contribute to a vibrant local economy.

We are a membership organisation working for NHS, higher education, local government and industry organisations in Kent, Surrey and Sussex. Our approach is to work closely with existing networks, leaders and committed staff across the patch.

We'd like to thank everyone who was involved in the lead up to the signing of our five year contract with NHS England in November for their leadership, passion and commitment to stronger collaboration between industry, academia, health and social care.

Together, we'll deliver the healthcare innovation that will have the greatest impact for people in Kent, Surrey and Sussex. We look forward to working with you in 2014/15.

With our best wishes

Somil Cyte Sin Guy Boerspa

David Clayton-Smith, Chair

Guy Boersma, Managing Director

4/5

The innovation challenge

Clinical needs and industry innovation are not always well aligned. Even when they are, the healthcare maze can make it very difficult for successful innovation to spread fast and wide.

Innovation acceleration for Kent, Surrey and Sussex



for Kent, Surrey and Sussex

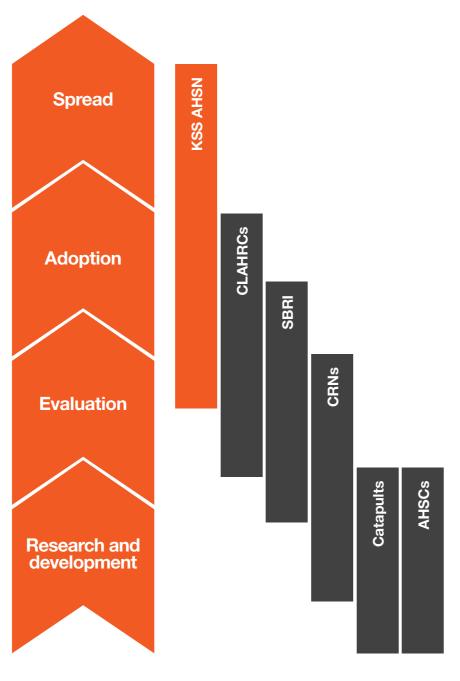
The innovation challenge

Innovation, Health and Wealth (2011) set out the blueprint for AHSNs: "Every local NHS organisation should aspire to be affiliated to its local AHSN, which would act as a high quality, high value gateway for any **NHS** organisation needing support or help with innovation, and provide industry with focused points of access to the NHS".

Effective combination

We have developed an approach to strengthen collaboration between industry, academia, health and social care. The aim is to speed up the spread and adoption of existing best practice and identify and accelerate diffusion of the best new innovations. We work with others whose role is complementary to our focus on spread and adoption. In addition to our members, key partners include NICE, the Clinical Senate, Health **Education Kent Surrey** Sussex and the four **Strategic Clinical Networks** covering this region.

KSS AHSN is not alone in nurturing innovation but we have a much stronger focus on spread and adoption compared to others who support research and evaluation or provide funding



Key

CLAHRCs

Collaborations for Leadership and Applied Health Research and Care undertake applied health research and support its translation into practice

SBRI

contracts

CRNs Small Business Clinical Research Research Networks Initiative for enable patient Healthcare and healthcare competitions professional result in participation in fully funded clinical trials development

Catapults

facilitate business- and research-based innovation to test concepts and bring them to market faster

AHSCs

Academic Health Science Centres are university and healthcare partnerships focusing on research. clinical service, education and training

KSS in numbers



4.8 million people living in Kent, Surrey and Sussex



Health and social care commissioning budget



Health and social care employs 100,000 people

unacceptable variations in the standards of care

65,000 people living with dementia highest proportion of population in UK





technology companies - the highest concentration in Europe



growing and ageing population



Our objective

Enhancing the public's benefit from innovative products and services and creating a more vibrant local economy.

By 2018, we will have added value to 75 innovations with high patient and economic benefit.

Enhancing access to innovation



Navigator Advisory Service

We launched our Navigator Advisory Service (NAS) this year to offer innovators a faster way to get better products and services into practice. Our focus is on accelerating innovations with high growth and high patient impact potential. The NAS provides one point of contact for all innovation

proposals - from industry, the health and social care sectors, academia and the third sector. We evaluate submissions and provide the best with access to a multidisciplinary network of advisors and mentors. The NAS can be accessed at www.kssahsn.net

During 2013/14, with our networks of over 300 clinical experts, we added value to 14 innovations. That's the first step on the journey to 75 by 2018. We have also offered feedback and signposting to more than 140.

In the words of Geneix managing director Mark Bartlett, "AHSNs ... crucial for SMEs penetration of new NHS market #nhssme they are a phenomenal initiative. KSS AHSN really helpful."

Ground Vision's Nick Whiteley, Chief Technology Officer, believes three things in particular about working with us made a difference. He said his company's "positive experience" with KSS AHSN was about our "open and direct engagement, pragmatic and timely approach to working with industry and focus on achieving positive outcomes for all stakeholders".

Revolutionising diabetic retinopathy prevention and treatment

Current treatments for diabetic retinopathy – sight loss in patients with diabetes – can be invasive and expensive. Sight loss is a frequent occurrence for ageing patients with diabetes, a cohort of patients that is growing fast.

PolyPhotonix is an SME joint venture with CPi (Centre for Process Innovation), and new to working with the NHS. It has developed a sleep mask for the prevention and treatment of diabetic retinopathy. The mask is a non-invasive, monitored therapy for use in the patient's home. It aims to improve patients' quality of life, slow sight deterioration and be delivered at a price below the current treatment cost.

There is both market need for a better solution and supplier need for expertise to accelerate R&D, evaluation and adoption. Our members are supporting PolyPhotonix's Phase III multi-centre trial through principal investigators based at Frimley Park **Hospital NHS Foundation Trust, Maidstone and Tunbridge Wells NHS** Trust, and Brighton and **Sussex University Hospitals NHS Trust.**

Further development funding from the Technology Strategy Board's Small Business Research Initiative (SBRI Health Care Initiative) and support from KSS AHSN has helped PolyPhotonix learn from early engagement with clinicians and better understand the NHS marketplace.

The company is now pursuing its route to market, building its evidence to demonstrate value for money and affordability as well as clinical efficacy. To support this, we convened a meeting of healthcare commissioners and providers in North **West Surrey to explore** collaboration with PolyPhotonix and agree how best to collect value for money evidence ahead of a submission to NICE's MTEP programme to secure a 'case for adoption' endorsement.

Going forward in to 2014/15, KSS AHSN will be working more closely with South West Peninsula and Wessex AHSNs to create the market conditions for PolyPhotonix to fulfil its wealth creation and health improvement potential.



Supporting industry innovation development

In addition to seeking out the best new products and services, we also work with clinicians and patients to articulate the challenges and issues they face.

Working with existing clinical networks, we have piloted approaches to providing industry with statements of healthcare market needs to inform their product development.

£32million SBRI opportunities for industry innovators

KSS AHSN and Wessex
AHSN partnered with SEHTA
to help unlock SBRI funding
for local businesses and
submit strong applications
to the Technology Strategy
Board, an arm of the
Department for Business,
Innovation & Skills. An

SBRI challenge focused on COPD made up to £32million available nationally for investment in innovative ideas and technologies. Over the summer, we and Wessex AHSN worked with **COPD** champions from our clinical communities to create a brief articulating their needs. The brief was shared with industry and other innovators to encourage applications for funding innovation leading to better care for people living with COPD.

As part of our support, we held a joint event with SEHTA to connect industry and the COPD clinical champions to discuss opportunities and potential SBRI bids.

"The opportunity to work with KSS and Wessex AHSNs on the COPD SBRI project was an exemplar of how industry would like to engage with the NHS and care sectors. If the NHS and care sectors can define their needs, and in this case link to some catalytic funding to help develop solutions through SBRI funding, then the best and most innovative of companies will engage for the benefit of patients.

Industry would like to go even further with health and social to co-develop better patient-centred solutions. It's really exciting that KSS AHSN has started working with SEHTA and its members in this ground-breaking way."

Dr David Parry, Chief Executive Officer, SEHTA

Kent Surrey Sussex dementia call 2014

The number of people with dementia is going up all across the UK. Numbers in Kent, Surrey and Sussex are particularly high.

Improving dementia care is a national priority and many organisations are actively involved in raising standards of care.

There are around 800,000 people with dementia in the UK. A quarter of hospital beds are currently occupied by people with dementia. It's estimated that the disease costs the economy £23 billion a year. By 2040, the number of people affected is expected to double and the costs are likely to treble.

The dementia call piloted creation of an innovation community able to articulate unmet needs to industry and other innovators.

In Kent, Surrey and Sussex there are more people with dementia per head of population than any other region.

The KSS dementia call 2014 launched in January. Its aim was "Enhancing the lives of people living with dementia" - from recognising there is a problem to end of life care and support.

Acting as "intelligent lead customer" we used the community's insight to create a "call to industry". This broadened the community further to help find innovations which could really make a difference for people living with dementia, their carers and clinicians.



Our objective

Enhancing quality with 430,000 patients receiving consistently high quality care.

By 2018, over 10% of the KSS population will have benefited from faster adoption of best practice and reduced unwarranted variation.

Enhancing quality and recovery



Enhancing quality and recovery

Speeding up the spread of best practice and reducing variation in the quality of care means better results for patients.

Enhancing Quality and Recovery (EQR) is an innovative clinicianled and award-winning quality improvement programme. It spreads best practice, research evidence and the best new innovations through service improvement networks
that bring clinical
communities together. It
drives greater compliance
with NICE guidance and
tackles one of the most
pervasive barriers to
innovation - poor access to
evidence, data and metrics.

During 2013/14 we passed the 100,000 milestone on the way to our objective of 430,000 patients receiving consistently high quality care by 2018. The three EQR programmes – Enhancing quality, Enhanced recovery, and the Respiratory Network – enable innovation to spread across clinical networks.

We also began supporting the planning and preparations for a new Patient Safety Collaborative.

Saving lives with better care and best practice

Each Enhancing Quality (EQ) pathway enables clinicians to work together to reduce variation and spread existing best practice and the best new innovations. A vibrant clinical network is created around each pathway. The networks share data and learning, making benchmarking more effective and enabling best practice to spread faster. Ultimately they're about ensuring more patients receive the highest standards of care and supporting members to achieve and sustain improvements.

Many EQR care pathways reflect members' focus on reducing preventable emergency admissions. They include:

- acute kidney injury (AKI)
- bone health, including fractured neck of femur
- heart failure across acute and community settings
- chronic obstructive pulmonary disease (COPD)
- dementia including assessment and diagnosis
- enhanced recovery in elective surgery including intraoperative fluid management (IOFM).

Using data to inform clinically led improvements to care is a powerful tool within the EQR approach.

"Most people haven't heard of AKI and most doctors overlook it. Improvements in basic care led by data can significantly improve clinical care and patient safety."

Dr Michael Bedford, Renal Research Registrar, East Kent Hospitals University NHS Foundation Trust

EQR data

18/19

EQ improvement

Heart failure patients receiving improved care – all of the elements that together make best practice



increased from 10% in 2010

to 70% by the beginning of 2014



Outcome improvement

EQ pathways have meant over 750 potential deaths have been avoided and over 25,000 potential bed days saved.

ER improvement

Pathway	# Patients with full care bundle		% Increase
	2012	2013	
Orthopaedics	4,293	8,701	103%
Colorectal	364	883	143%
Gynaecology	812	1,998	146%
Overall	5,469	11,582	112%



It spans the whole care pathway and measures the quality of care delivered, starting at primary care and covering before, during, and after, operation. The experience of patients during their hospital stay is also measured. As a result, patients are now recovering much more quickly after surgery with fewer complications.

ER networks also provide an excellent means of spreading good practice, for example the optimisation of fluid management during surgery. In December we published a major national **NICE** report, Intraoperative fluid management (IOFM) technologies, which describes the solutions currently available to the NHS and indicated for **IOFM.** It summarises evidence from randomised trials and informs anaesthetists and other professionals to consider various IOFM technologies.

This, together with collaborative learning opportunities, is an example of how we are supporting members to identify and implement solutions which mean better care for more patients.

Making operations safer

Deltex Medical Ltd is a SME based in West Sussex whose CardioQ-ODM **Oesophageal Doppler** Monitor (ODM) enables safe fluid management during surgery. Intraoperative Fluid Management (IOFM) technologies monitor and manage a patient's fluid status during surgery. The **Deltex Medical solution is** supported with a specific NICE recommendation and 'case for adoption' endorsement but still faces barriers to adoption.

We established a measurement process as part of an Enhanced

Recovery pathway and held peer reviews with senior NHS trust leaders and clinicians. A number of barriers were identified; the most significant were a lack of credible evidence reviews of the technologies and incomplete data of patient benefits.

We wrote a specification for an evidence review which was commissioned by NICE. We worked with the researchers to shape the report to ensure its usefulness for clinicians. The review was launched at a meeting with anaesthetists and other relevant staff

from each Kent, Surrey and Sussex acute trust and a few from beyond the region. This has contributed to IOFM usage in Kent, Surrey and Sussex increasing by 24% during 2013. We have the highest spread of IOFM in the country, bringing safer care to more patients. Deltex have been able to create jobs on the back of increased adoption and enhanced credentials for export sales growth.



Enhancing care for respiratory patients

Respiratory disease is a high incidence and high cost (in terms of patient quality of life and cost of care) group of long term illnesses. The three main diseases in this group are chronic obstructive pulmonary disease (COPD), asthma and pneumonia. The respiratory network brings together clinicians from across the region to share best practice in the care and treatment of respiratory patients.

The network's objectives include:

- increasing access to stop smoking services for patients with respiratory disease
- reducing hospital admissions and readmissions of patients with COPD
- increasing the number of patients receiving pulmonary rehabilitation
- reducing mortality of patients with pneumonia
- reducing the number of patients experiencing oxygen toxicity
- increasing the proportion of patients receiving a fully managed service for oxygen in the home
- reducing the gap between expected and diagnosed cases of COPD.

Becoming part of the AHSN increases the network's opportunities for collaboration with industry and research partners. It also extends the network's reach for the identification, spread and adoption of innovation.

Improving COPD care through best practice and innovation

A collaborative approach, initially involving a number of partners around East Surrey hospital, has seen care further improve for patients with COPD. This is the first phase of developing a KSS-wide approach.

The project aims to:

- achieve sustainable COPD care improvements for patients
- reduce COPD admissions, A&E attendances and 30 day readmissions
- embed COPD best practice pathways
- enhance pathways with technologies and innovations.

After engagement with partners, the clinical pathway of evidence based, best COPD practice was described. Collaborative workshops enabled the pathway to be edited and revised prior to being used to ensure delivery of best care right across Kent, Surrey and Sussex. This included expanding pulmonary rehabilitation services and establishing new clinics within palliative care services.

"Reaching for improvement and sustaining achievement is a continual struggle. We're working with KSS AHSN to make it sustainable."

Dr Ed Cetti, EQR Clinical Lead and Consultant Respiratory Physician, Surrey and Sussex Healthcare NHS Trust Enhancing quality and recovery

Acute kidney injury

Acute kidney injury (AKI) is common, affecting 10-20% of hospitalised patients. Our AKI pathway is a process to identify all patients with AKI regardless of where they are in hospital. It also ensures the right clinical processes are applied to every patient, every time; reducing the incidence of AKI and improving patient outcomes.

Robust clinical data, strong clinical leadership and collaborative learning result in an improvement in the quality of patient care and a reduction in variation in clinical processes. It also promotes a culture of excellence across participating organisations.

Heart failure

Heart failure (HF) is a debilitating condition that has profound implications for individuals who are affected in terms of life expectancy and quality of life. The HF pathway creates a process in which strong clinical leadership, benchmarking and collaborative learning is used to identify and reduce variation in heart failure care. Measurement helps to improve quality of care and patient experience in hospital and in the community. In hospital this includes diagnostic assessment, drug therapy, discharge and self management. In the community it includes patient management, care planning and drug treatment.

Care has been improved through a number of developments, including enhanced access to diagnostics and the appointment of new integrated specialist heart failure nurses whose cross-sector roles connect hospital and community care.

Fractured neck of femur/bone health

Fracture of the neck of femur is associated with mortality and care for this fracture costs more than for others. It is more common after the age of 50. The new pathway aims to implement quality systems to reduce hospital admissions as a result of fragility fractures, and improve care for admitted patients.

It will build on process measures currently in the National Hip Fracture Database, ensuring availability of more real time, validated clinical data for continuous improvement in patient care. It will enhance management of fractures for continuous improvement in patient care, with strong clinical leadership and collaborative learning.

Dementia

The dementia pathway involves collection and consistent use of clinical process data triangulated with outcomes. It streamlines care and improves documentation, making the care provided more consistent and reliable for every patient, every time. This sustained focus on process and outcomes delivers less variation in care, better results and reduced costs.

Assessment and diagnosis covers a range of indicators of best practice and pan-KSS recording of the diagnosis and type of dementia. Patient and carers are offered information about their condition, treatment and local support options, alongside contact with a dementia specialist advisor. Patient experience measures focus on the patient's view of the information provided as well as their level of understanding and involvement.

We commissioned the National Council for Palliative Care to deliver training to KSS health and social care staff working with any aspect of dementia care. The one day workshops incorporate three core elements, the Mental Capacity Act, core communication skills and advance care planning, to actively link theory and legislation to best practice.



Our objective

Enhancing research capability across KSS.

By 2018, KSS research capability enhanced and Clinical Trial Unit accreditation secured.

Enhancing research capability



Enhancing research capability

We are helping improve KSS's research infrastructure by:

- facilitating Clinical Trials Unit (CTU) bids
- aiding Comprehensive Research Network (CRN) establishment and trial recruitment by members
- enabling aspects of the work programme developed for the CLARHC bid
- developing tomorrow's researchers with NIHR and Health Education KSS, and
- spreading effective practice.

Stronger connections

KSS AHSN is supporting members to strengthen the connection between research, healthcare innovation and patient benefits. Our plan is to develop a research aware and enabled community. This includes educating clinicians on research methods with **Health Education Kent** Surrey Sussex and spreading good practice by exploring the potential of clinical academic groups based on the model used in Surrey.

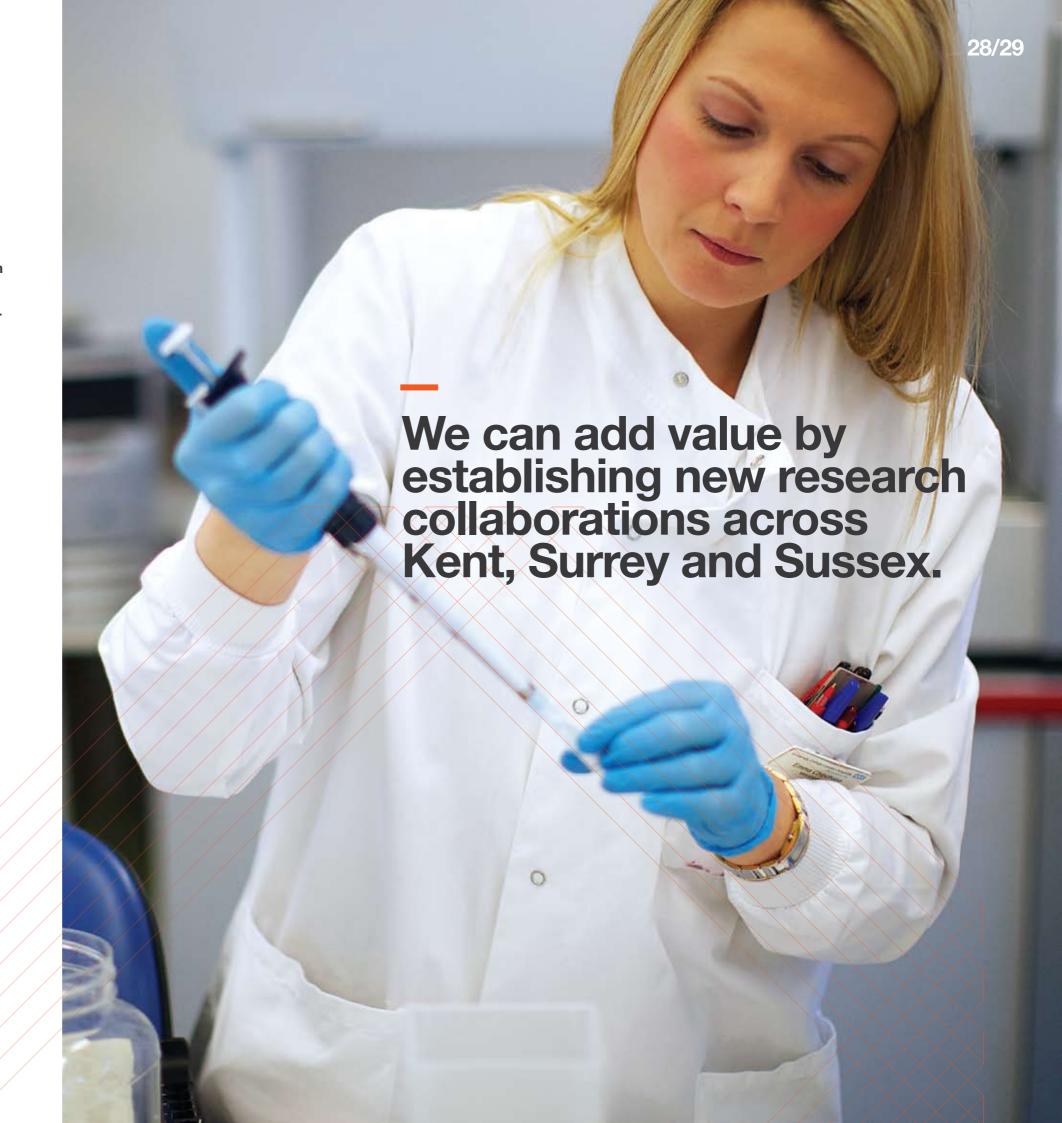
The submission of a bid for a KSS CLARHC provided a well-timed opportunity for co-ordinated work across the research community. Although the bid was not successful, the partnership platform it created has become the basis for further collaboration. Bid partners included 8 HEIs, 11 NHS care providers, NHS England's **Area Teams for Surrey** and Sussex and Kent and Medway, Health Education Kent, Surrey and Sussex, and KSS AHSN.

We can add value by establishing new research collaborations across Kent, Surrey and Sussex. This includes setting up a research capacity development group. The group strengthens collaboration amongst academics and other members of the healthcare innovation community. It operates at the interface between training/education providers - Health Education Kent, Surrey, Sussex, **National Institute for Health** Research (NIHR), and higher education institutions research support staff and NHS/industry.

Network support

We are supporting the establishment of the new NIHR Clinical Research Network: Kent, Surrey and Sussex (CRN: KSS). This is a merger of the existing CRN for Surrey and Sussex with the CRN for Kent and Medway and will strengthen the co-ordination and capability of research across the area.

We are also helping to enhance the regional Applied Health Research infrastructure and increase research capacity. This includes supporting the activities of research establishments who aspire to gain Clinical Trials Unit accreditation by 2015.





Acknowledgements

We'd like to offer our thanks to particular individuals and organisations whose support and financial backing has been invaluable during our first year:

Ashford and St Peter's Hospitals NHS Foundation Trust

Brighton and Sussex University Hospitals NHS Trust

CSH Surrey

East Kent Hospitals University NHS Foundation Trust

East Sussex Healthcare NHS Trust

First Community Health and Care

Frimley Park Hospital NHS Foundation Trust

Kent Community Health NHS Trust

Maidstone and Tunbridge Wells NHS Trust

Queen Victoria Hospital NHS Foundation Trust

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 Partnership NHS Foundation Trust

Western Sussex Hospitals NHS Foundation Trust

Our quarantors

CSH Surrey and Royal Surrey County Hospital NHS Foundation Trust.

Transition board 2013/14

AHSN Role Name

David Clayton-Smith KSS AHSN Chair

Chris Adcock/Matthew Kershaw Sussex acute trust representative

David Parry Industry representative

Des Holden KSS AHSN clinical director

Fiona Edwards Mental health trust representative

Guy Boersma KSS AHSN Managing director Jon Cohen Sussex HEI representative

Mike Sadler Local authority representative

Nick Moberly Surrey acute trust representative

Peter Jeffries Kent HEI representative

Richard Barnett CCG representative

Stuart Bain Kent and Medway acute trust representative

Tom Quinn Surrey HEI representative

Tricia McGregor Community providers representative

New board established March 2013 (voting members)

David Clayton-Smith, Chair

David was previously the Chair of NHS Surrey for three years from 2010. He was also the Chair of NHS Sussex between 2012 and 2013 and is currently a non-executive director at Frimley Park Hospital NHS Foundation Trust. He is also a member of the International Board of Fairtrade having been **Chair of The Fairtrade** Foundation in the UK. David is director and co-founder of Andrum Consulting which specialises in supporting entrepreneurial businesses.

Tricia McGregor, **Non-Executive Director**

Tricia is joint Managing Director of CSH Surrey, which she established as the first social enterprise to come out of the NHS, back in 2006. Tricia brings a wealth of experience in performance improvement and in engaging and motivating healthcare staff to deliver high quality care.

Anna van der Gaag, **Non-Executive Director**

Anna is chair of the Health and Care Professions Council, a UK wide regulator of 16 health, psychological and social work professionals.

Martin West, **Non-Executive Director**

Martin is an independent consultant in strategy, finance and governance and currently a non-executive director at NHS Property Services Ltd.

Guy Boersma, **Managing Director**

Guy has focused on improving public services from within the NHS, central government, private sector and professional services firms. He has worked across the NHS in Kent and Medway, Surrey and Sussex since 2010.

Des Holden, Medical Director

Des is currently Medical Director at Surrey and Sussex Healthcare NHS Trust and joined its board in June 2011. He is a regional expert and advisor to APEC, the national charity supporting action against pre-eclampsia.

Our governance

Our members hold the KSS AHSN chair to account. The chair leads the KSS AHSN board, supported by board committees and a scheme

of financial delegation. The managing director is held to account by the KSS AHSN board.

Timeline

KSS AHSN established as a social enterprise, with member liabilities limited to £1.

First three non-executive directors appointed.

We appointed our medical director, Des Holden, and exceeded 140 innovations signposted in year; adding high value to 14 with greatest

potential.

We appointed

15 AHSNs our chair, designated by **David Clayton-**NHS England. Smith.

We appointed our managing director, Guy

Boersma.

KSS AHSN

by Royal

Trust.

establishment

began, hosted

Surrey County

Hospital NHS

Foundation

July Heads of terms agreement with NHS England signed. We held our first Partnership Day, attended by over 140 senior leaders

from KSS.

Contract with

NHS England

signed.

Over 135,000 **KSS** patients benefiting from enhanced quality care.

Leaders from industry, academia and health and social care agreed the AHSN geographical

footprint as Kent, Medway, Surrey and Sussex. Adrian Bull was appointed interim Chair.

We published our prospectus and recruited a representative transition board.

Networks to

help unlock

the potential

of innovation

improvement

for health

and wealth

creation.

Over 95,000 KSS patients benefiting from enhanced quality care. CLARHC bid mobilised and submitted.

The government's Plan for Growth highlighted the healthcare and life sciences' contribution to the economy by improving health and increasing

wealth, with innovation as a key driver of long-term growth.

The Strategy for UK Life Sciences and Innovation, Health and Wealth signalled creation of Academic **Health Science**

Over 40,000 **KSS** patients benefiting from enhanced quality care

Kent Surrey Sussex Academic Health Science Network









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