# Innovate

Issue 15

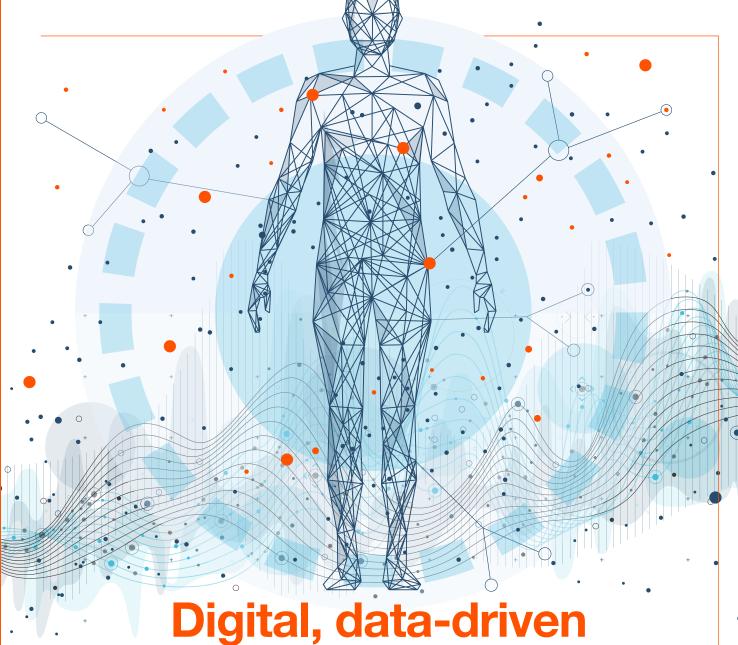
**Summer 2019** 

**Transforming lives through innovation** 

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- Innovation Exchange
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Partnership Day



Digital, data-driven and patient-centred

The future of healthcare?

### **Funding opportunities**

#### **Engineering and Physical** Sciences Research Council

#### Healthcare technologies discipline hopping call

The scheme is targeted at individual researchers who wish to develop their research in healthcare technologies by developing new skills and collaborations with other disciplines and end users.

Deadline: 27 June 2019

More information: tinyurl.com/y7xn7xqs

#### **National Institute for Health Research**

#### **Public Health Research Programme Rapid Funding Scheme**

The scheme has been set up to provide the public health research community with an accelerated route to funding for small-scale, short and time sensitive proposals that demonstrate a need for a rapid commissioning process to be followed.

Deadline: 31 December 2019 More information: tinyurl.com/ydycrv3x

#### Wellcome

#### **Innovator Awards**

These awards support researchers who are transforming great ideas into healthcare innovations that could have a significant impact on human health.

Deadline: Open call

More information: tinyurl.com/gvr2zqv

#### The Health Foundation **Evidence into practice**

A programme of grants from the Health Foundation that funds the development of tools and resources, based on completed research studies, to support the implementation of findings in practice.

The programme will be open for application in October 2019 More information: tinyurl.com/y3hn2z8a

KSS AHSN is one of 15 Academic Health Science Networks in England. Our principal funding comes from Office for Life Sciences and the NHS.

**Kent Surrey Sussex** Academic Health Science Network





### Insight

It won't take you long to realise that this edition carries a number of articles relating to our work with industry.

The reason we've focused on industry is because this issue is being published to coincide with Bridging the gap 3 - a national event where industry delegates will be able to get advice about how to make their engagement with the NHS sharper and more cost effective.

This proves to be an incredible event, and I'm sure we'll bring you news from it in our forthnightly enewsletter, Collaborate.

But as well as stressing the importance of our work with industry, this edition also gives a snapshot of the wide range of other work that we're involved with at KSS AHSN.

I'm particularly pleased to see the highlight figures from our Annual Review (see page 16). This snapshot of stats truly shows the breadth and depth of the work that we're involved in, with a range of partners.

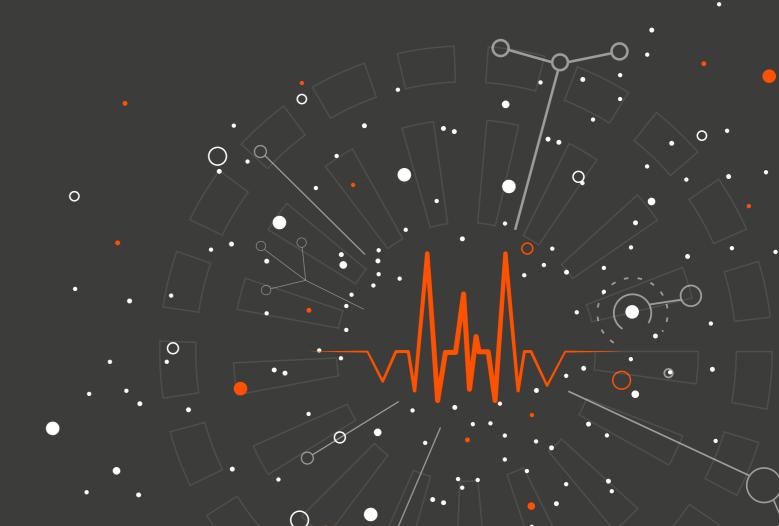
As well as giving you the top line figures, I'm pleased that we've been able to find space to profile four of our projects (page 18) to show some of the wider context in which we work.

And of course KSS AHSN is also the home of Kent Surrey Sussex Patient Safety Collaborative. As with the AHSNs, KSS PSC is one of 15 such organisations across England. The network is entering an exciting period as it standardises its workstreams and focuses on the spread and adoption of key projects - find out more on page 20.

I'm proud that KSS PSC will be responsible for the roll out of two of these national projects. The fact that they've been chosen to do so pays testament to their work, and the support of all of our partners, including industry, across the region.

The eagle-eyed reader will have noticed our new strapline on the front cover - Transforming lives through innovation. This statement will form the theme of our Partnership Day on July 5 (page 22), and I look forward to seeing you there.

Best wishes



# Making sense of a complex world

As one of 15 Academic Health Science Networks (AHSNs), KSS AHSN is able to offer a range of support to healthcare innovators as they navigate a complex landscape.

Many companies who want to work with the NHS find its complexity daunting.

AHSNs provide a range of services to companies who have a service, product or technology for use in the NHS. We do this through our national "innovation exchange" approach.

The Innovation Exchange is coordinated by AHSNs to identify, select and support the adoption of innovations that improve patients' lives, clinical outcomes and our economy.

Funded by the government's Office for Life Sciences, the Innovation Exchange builds 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.

Whatever stage companies are at, help to navigate the complexity of the health and care sector can make a real difference. AHSNs offer anything from an initial meeting to an going relationship, such as the one between Docobo and KSS AHSN - see case study on next page.

### The Innovation Exchange has four structured elements:

#### **Needs definition**

We support our Sustainability and Transformation Partnerships (STPs) and Integrated Care Systems (ICSs) to identify validated solutions to existing challenges.

#### Industry support and signposting

All AHSNs support industry with a consistent and co-ordinated offer to innovators wherever they are identified in the system, so that the benefits of new products and services reach more patients faster.

#### Real world validation

Real world validation seeks to provide the information and evidence needed to enable adoption of an innovation in a variety of real world settings.

#### Spread and adoption of supported innovations

We support the scaling up of innovation that has been validated as effective in real world settings and support the spread and adoption of innovation identified by the Accelerated Access Collaborative.

Rob Berry, Head of Innovation at KSS AHSN, said that the AHSN Network has a key role to play in supporting industry looking to develop innovative healthcare solutions.

"By focusing on solutions that are near or close to market, AHSNs are able to play the vital role of strategic partner to offer the long-term support that SMEs need to scale up their innovation." he said.

"Bridging the gap events are one way in which we make as many of these services as possible accessible to industry in one place, on one day."



#### Case study: Docobo ArtemusICS™ Population Health Solution

KSS AHSN has been supporting Docobo for more than five years, providing support, advice and introductions that have allowed the company to refine and develop its offering.

Docobo's mission is to improve the quality of life through the efficient implementation of digital health solutions.

By integrating data sets from health and social care settings, including primary care, secondary care and mental health, ArtemusICS provides the actionable data insights needed for early intervention initiatives, resulting in better planning, costeffective care delivery and improved patient outcomes.

Collaborative working with Crawley CCG and Horsham and Mid Sussex CCG has enabled clinically relevant co-design of the technical developments, delivering a market leading edge to the tool.

**Bharti Mistry, Programme Manager** and interface between the clinical

and technical team at Docobo, said the clinical direction provides the data relevance and value for direct patient care.

"ArtemusICS enables commissioners to segment their population and target appropriate interventions," she explained.

"The tool allows population profiling at CCG level, while at a practice level it's possible to drill down to individual patients for synergetic analysis and case finding."

Jacqui Nettleton, Head of
Community Services, Crawley and
Horsham & Mid Sussex CCGs, said
that the CCGs have been able to
develop a proactive care strategy,
pivotal to which is their primary care
network multidisciplinary teams
with providers in both health,
social care community and the
voluntary sectors.

"The tool is invaluable for informing population commissioning and underpins a proactive approach to care planning and case finding so that emergency and reactive care is reduced, including emergency admissions," she added.

ArtemusICS is also being used to tackle social isolation through social prescribing, and in the early identification of patients reaching end of life.

Adrian Flowerday, Managing
Director and co-founder of Docobo,
said that KSS AHSN's support has
been invaluable in building vital
connections within the region.

"We're delighted to have been able to build a long-lasting relationship with the CCGs and support them to improve clinical, commissioning and operational care decisions by providing insights into cross-sector data by using our ArtemusICS tool," he said.

"ArtemusICS is innovative and incremental, and adaptable to the NHS environment. It has recently been further enhanced to support STPs, ICPs and PCNs with their challenging agendas."

# Preparing the NHS for a more sustainable, tech-enabled future

James Barsby, MedTech Innovation Consultant on behalf of KSS AHSN, considers the findings of the recent Topol and MedTech Landscape reviews.

The future of MedTech is becoming increasingly digital, patient-centered, data-driven and integrated – a key remark that some might say we have heard a lot about recently and could certainly be gleaned from the recently published Topol review.

Within the review Eric Topol talks about how the cutting-edge advances will cause medicine to change and the workforce in healthcare to be better enabled - both to adopt and harness tools from areas such as robotics, Al and genomics in the drive for better patient outcomes.

#### A unique juncture

"We are at a unique juncture in the history of medicine, with the convergence of genomics, biosensors, the electronic patient record and smartphone apps, all superimposed on a digital infrastructure, with artificial intelligence to make sense of the overwhelming amount of data created,"

Industry leaders can take some insight and potentially some comfort from this, in that the type of innovation that is needed will ultimately be helping to nudge healthcare further toward highlyspecialised care, more centralised service provision.

Those conditions that are seen to fall into more generalised categories will be seeking innovation more than ever in the

future, along with an upskilled workforce and less-specialised care provision – all will help tackle ever-increasing demand.

Where accredited continuous professional development and educational improvements for undergraduate healthcare curriculum is mentioned, better understanding of data analytics, and the complexity of technology assessment is suggested as a method that can help tie together challenges facing data informed clinical decision making.

#### The importance of patient input

As concerns around safety, data ethics, validity and accuracy come swiftly to everyone's mind, the appreciation for building robust frameworks around consent, regulation and patient input is outlined.

Outputs from AHSN led innovation, increasingly Al-based technologies developed in collaboration with industry as a result of unmet need, may well underpin the changes sought by the sector.

#### Tight on time?

It seems we're close to running out of time according to the report, as it states "Recognising that there will be a five-to-seven year time lag to full adoption, there is now a window of opportunity in which to strengthen the infrastructure, upskill the workforce and catalyse the transformation."

Similarly, the innovation arm of the NHS, The Academic Health Science Network and the Office for Life Sciences (OLS) authored a MedTech Landscape Review. This highlights concerns that resemble perceptions of the current vs future system and proposes a way forward that inspires renewed focus on building a costbenefit led argument for technology – most useful when it comes to making a business case fit for the NHS.

While these reports have received mixed reviews, you may come to your own conclusions over either guide's relevance to your MedTech company.

Overall, the Landscape report sets out its stall for the sector while providing a well-developed signposting resource and discussion piece for any business owner who may be considering developing a MedTech product or solution – particularly companies looking for market adoption in healthcare markets such as the NHS.

#### International engagement

The significance of encouraging companies that may or may not originally be based in the UK to involve the AHSNs in this process is clear.

The document does well to hint at 'the direction of travel', proposing AHSNs need to be more closely aligned across

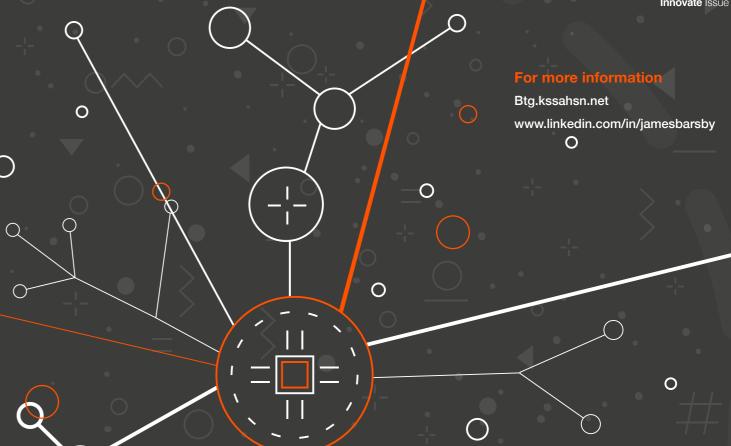
regions, perhaps using components of the text, encouraging the partnering of companies with existing regional and attractive national resources, while pointing to government making more of a coordinated effort to facilitate higher quality market research, productivity and outputs.

#### The role of the AHSN network

AHSNs are already well positioned to be THE network of networks that can stimulate and optimise growth of cutting-edge firms in the health and lifesciences sector. Increasing both investment into MedTech and a focus on upskilling the innovator workforce

can only serve to improve the quality of the tools we harness in the future.

The realisation that this arm of the NHS, and others, are coming around to the importance of facilitating the increase of standards relating to market research, evidence and real world validation companies have completed prior to adoption and ultimately scale, might just be the roadmap to success that the UK's healthcare sector needs to make meaningful change.



# Providing essential insights for MedTech innovators

Real world validation has a key role to play in supporting the uptake of technological innovations in the NHS. But just how does it work in practice?

Through our real world validation process we're able to provide the evidence that the NHS needs, at a systems level, to make pragmatic, evidence-based decisions.

The work also helps companies to understand the necessary rigour that's required to pass the NHS's tests of effectiveness and efficiency.

Richard Lee-Wright, KSS AHSN's Director of Insight, said that his team's process, which blends a Quality Improvement approach with health economics analysis, can benefit all parties.

"Through our work we're able to help companies understand whether they have the appropriate evidence base to meet the needs and requirements of the NHS." he said.

"And for the NHS, we're able to de-risk future implementation by asking the appropriate questions, and gathering robust evidence, from the outset."

Richard and his team generally start to work with companies once they have a one- to three-site implementation in place. Whether the work is commissioned by the company itself, or an STP looking for validation support before taking on a new product, the approach is still the same

"Real world validation is most definitely a fully collaborative piece of work between the company, the NHS and ourselves," Richard said.

"We work with all parties to truly understand what it is they're setting out to determine, and tailor our approach accordingly."

#### Find out more:

www.kssahsn.net









#### Case study: Healthy.io

The NHS conducts 42m urine tests a year, making it the second most common diagnostic test. A new approach aims to transform the way these tests are carried out.

KSS AHSN has been working with medtech company Healthy.io to build an economic model for its urinalysis technology, Dip.io

Dip.io works by harnessing the power of a smartphone camera to scan a urine dip stick, producing clinical grade results within three to five minutes.

These results are flagged on the clinical system, allowing the clinician to follow up on any adverse readings.

The company is already utilising the technology across two pathways – chronic kidney disease and urinary tract infections. It is now looking to expand the product's reach into ante-natal care.

Natalya Wallentin, Product Marketing Manager for Healthy.io, said that the company was already in contact with a number of AHSNs, thanks to its involvement with the NHS Innovation Accelerator.

"We needed to build a robust business case, specifically for the NHS, but didn't have enough evidence to provide the cost effectiveness of the product within an NHS setting," she said.

"We received very useful initial feedback from the KSS analytics and evaluation team, and based on that we decided to work with them on the economic model.

"This model has provided us with great insight into the product, enabling us to better understand which inputs have the biggest impact.

"The findings have allowed us to leverage our evidence base and strengthen our commercial strategy. We're now very clear about what our upcoming evaluation trial should focus on.

"This model has helped us better focus an upcoming evaluation within the NHS. It gave us a clear plan to better test and prove our assumptions about the product."

### Enhancing patient experience in antenatal care

Dip.io enables pregnant women to reliably and conveniently test at home for proteinuria. Benefits include the early identification of pre-eclampsia, peace of mind, and increased control between scheduled visits for high risk patients' pregnancies.

Digital home-testing has the potential to reduce up to 60% of outpatient appointments in the 3rd trimester and reduce antenatal consultation time by 25%.

## From small acorns...

Guy Boersma, Managing Director of KSS AHSN, reflects on how work around dementia has grown in the region since the launch of the Technology Integrated Health Management for Dementia (TIHM) project three years ago.

TIHM has been a landmark project in a number of ways – it is regarded as the most promising of the Wave 1 NHS Test Beds and has received numerous awards, including the 'Improving Care with Technology' award in what is the world's largest healthcare awards programme, run by health publication the HSJ.

It was also the first multi-millionpound win in which KSS AHSN was heavily involved, bringing together a consortium including Surrey and Borders Partnership NHS Foundation Trust, Alzheimer's Society and the University of Surrey's Al Machine Learning team.

#### **Putting Surrey on the map**

As well as being our first high value bid, the TIHM project has also put the University of Surrey Al Machine Learning Team, led by Professor Payam Barnaghi, on the map as a leading player in dementia research.

In April this year it was announced that they would be collaborating again with Alzheimer's Society. Together, the Medical Research Council, Alzheimer's Society and Alzheimer's Research UK have provided £20m for a new Care Research and Technology Centre at Imperial College London. It has six themes, with the University of Surrey leading two of them.

As Fiona Carragher, Chief Policy and Research Officer at Alzheimer's Society said at its launch:

"850,000 people in the UK live with dementia, and they deserve the opportunity to live their lives to the full.

"Developing dementia shouldn't have to mean losing your independence and your choice to live in your own home, but we know there can be problems – from the 74-year-old who kept leaving the gas on, to the woman whose urine infection went undetected so long she ended up spending 12 weeks in hospital – and we want to find a solution."

#### Improving algorithms

These personal case studies came from the TIHM project, and it continues to improve its algorithms and identify deterioration in people's health earlier and earlier, enabling clinical intervention sooner, keeping more people at home.

The new Care Research and Technology Centre's goal is to develop technologies that enable people to live in their own homes for as long as possible, and its work will be based on elements of the TIHM work. This is a hugely exciting development for the University of Surrey, and we're delighted to see its expertise in this field recognised by such a prestigious project.

#### New models of care

The Care Research and Technology Centre offers huge scope around driving new models of care for those with dementia, and their carers.

Of course, this work has to go hand in hand with the promised Government overhaul of social care – or scarce, expensive and poor quality dementia care will only undermine our efforts to improve people's lives through technology.

Having such a strong new Research Centre gives us a whole range of new opportunities to help people maintain independence and live longer in their own homes.

It's great to see mighty oaks grow from small acorns.

#### Find out more:

www.surrey.ac.uk



## It's HIP to be square

Working in partnership with a leading group of universities, we've been able to give MedTech startups valuable support in developing their business strategies.

Healthcare innovators from across the South of England were able to test their business ideas in a four-day programme hosted by SETsquared and explained. KSS AHSN.

The Health Innovation Programme (HIP) is a comprehensive business support programme designed for healthcare and life science businesses then able to give them a systematic at various stages of development.

The initiative offers expert-led workshops that help healthcare entrepreneurs build pitching skills. write a compelling business plan, navigate the NHS landscape and find funding sources.

#### **Driving development**

SETsquared's Tim Doidge said that that the HIP helps businesses get to the next stage in their development.

"The programme introduces the companies to various business mentors who can teach them how to put a business plan together and get to the next stage, which probably would involve trying to raise investment," he said.

Among the innovations being developed to improve patient care were plans for community based health checks, a new approach to glaucoma care, an innovative stent design and a digital solution for services that manage musculoskeletal

Adrian Braine said that the programme helps innovators to see the bigger picture.

"We generally find that people coming into the programme are very focused on the product and its features," he

"What we do is get them to take a step back to determine what the company is about and articulate why others should care about what they do. We're process that they can use to evaluate their business idea."

#### A partnership approach

KSS AHSN and the three other Academic Health Science Networks in the South of England joined forces with SETsquared in 2014 to set up this pioneering programme. It aims to enable effective and better value healthcare technologies to benefit patients quicker than ever.

As well as finding out more about the NHS as a marketplace and understanding how their product fits into it, delegates get the chance to

polish their sales pitch and receive top-class mentoring advice from a range of experts during a 'speed mentoring' session.

Rebecca Porter, MD of BlueKit Medical, was one of the 12 entrepreneurs taking part in the event. Her company provides a range of Single-Use Procedure Packs.

"We're at a stage now where we want to get ourselves in front of investors so having that time and preparation to make a good pitch is fantastic, and the speed mentoring and feedback on the presentations and pitches was priceless," she said.

#### **SETsquared explained**

SETsquared is a partnership between five leading research-led UK universities: Bath. Bristol, Exeter, Southampton and Surrey. Twice ranked as the Global No. 1 Business Incubator, it provides a wide range of highly acclaimed support programmes to help turn ideas into thriving businesses.

More than 200 innovators have now passed through the Health Innovation Programme including NHS Innovation Accelerator (NIA) Fellows, companies that are now on the Innovation Technology Tariff/Payment and many of the companies have gone on to secure significant private and public sector funding (eg SBRI Healthcare).



# **Articulating needs around End of Life care**

Des Holden, KSS AHSN's Medical Director, considers how the concept of needs articulation supports those nearing the end of life.

In England it is normal for a woman to plan for the birth of her baby. Whatever her planning while trying for a pregnancy, whatever her reading or the source of initial advice, ultimately after a reassuring first trimester scan, she will be encouraged to think about what is important to her at the time of birth. Most couples write these thoughts as a birth plan, with views on technology, personnel, environment considered and written down as a guide they would expect to be respected.

Death remains as certain as birth yet the planning to make it as acceptable to the person and those they love feels less sure

#### Preparing for end of life

Most families half a century ago were familiar with a family member, or someone they knew dying at home, but this familiarity is now rarer. Talking with local hospice staff it is clear that people are less prepared, in general, for the end of life.

Within hospital the average age of acute admissions continues to rise. Although integrated care systems will surely help to move services that support people to flourish into the community, at this time many people die in hospital, often after multiple acute admissions within the last year of their life. These admissions can be short, or depending on individual circumstances and community infrastructure, not so short.

Either way they can be disorientating, lonely, and uncomfortable. Before it is realised the person is at the end of their life these admissions consume diagnostic and therapeutic resources and contribute to high levels of bed occupancy and temporary staffing spend.

#### Respect

Across Kent Surrey and Sussex the Respect tool is gaining traction as a tool to permit end of life discussions to occur and to be recorded. Until end of life is everyones' business, effort will continue to use a risk-based system for identifying those who are nearest their end of life.

Where these discussions do happen it's important the information is visible where and when it's needed. People who have given their information and those who need it have a right to expect this to happen, but in practice for many health systems it remains a challenge. Respect provides a tool for the discussion, but supporting staff to use it consistently, or the public to be asking for it (as with a birth plan) is still work in progress.

#### **Supporting individuals**

Numerically another significant challenge, as with birth plans, is how the wishes of individuals and their carers can be supported, and carried out. People who have made advanced care plans stating they do not want to

be admitted to hospital can still face crises which result in their conveyance to the emergency department of the local hospital.

As well as working with staff and families on the best way to broach the discussion of dying, working with similar groups on how plans go wrong will help us understand how better support can be given. People can be conveyed to hospital because information on their plans is unavailable, or not understood, or they can be conveyed because their pain is greater than they can manage, or because a staffing model that supports them during the day, within their home environment falls down out of hours, or at the weekend.

#### The role of technology

This is the territory where technology might have something to offer. It's the territory where remote monitoring and decision support algorithms could enable people to have the confidence to persist. It's also the territory where the Topol review might suggest there is room for a different sort of work force.

There's a lot to do in making the offering at the end of life as good as it can be, but the gains in quality and in use of resources make this focus highly worthwhile.

#### Find out more

Des.Holden@nhs.net www.kssahsn.net



# 18/19 Our year in a snapshot

In the year that the NHS turned 70 and launched its new Long Term Plan, health and social care was never far off the political or news agenda. Things were equally busy at Kent Surrey Sussex Academic Health Science Network, as these headline statistics from our Annual Review show.

# 2,225 patients benefitting

#### **RESPIRATORY**

Improving the quality, availability and accessibility of respiratory services.

 2,225 patients benefited from the Respiratory care bundles, with patients receiving an average of a day's length of stay reduction since 2014

# **7,992** traces

#### ATRIAL FIBRILLATION

Increasing the identification, timely review and rate of appropriate anticoagulation offered to patients with AF in order to reduce the number of AF related strokes and improve patient outcomes.

- 7,992 traces were taken using mobile ECG 1 Lead devices
- 793 possible AF results detected
- Equating to approximately 32 AF-related strokes being saved

# 1,400 patients benefitting

#### **ELC**

Improving standards of care for patients undergoing emergency laparotomy surgery.

- 100% of KSS sites are running the Emergency laparotomy Programme
- More than 1,400 patients benefited due to the implementation of the ELC care bundle
- This is a potential ROI of £684,506

# 164 GP practices implementing

#### **PINCER**

An audit tool that searches GP practice computer systems to identify patients being prescribed medicines that are commonly and consistently associated with medicine errors.

 164 GP practices implementing PINCER solution, with more coming online in 2019/20 and patients due to start benefitting imminently

# 82 innovators

#### **BRIDGING THE GAP**

A range of services to support industry to work with the NHS.

 82 innovators participated in either a Market Insight Briefing, an Innovation Surgery, a one-toone meeting or a combination of these sessions, receiving more than 900 hours of support

# 100% of maternity units adopting

#### **PRECEPT**

Helping to reduce cerebral palsy in babies through the increased antenatal administration of magnesium sulphate (MgSO<sub>4</sub>) to mothers during preterm labour.

- 100% of maternity units are running the PReCePT programme
- 237 mothers were given MgSO<sub>4</sub>, a 78.5% uptake, meaning an additional 50 babies benefitted from the previous year

### 10 sites implementing

#### TRANSFER OF CARE AROUND MEDICINES

Improving the way patients' medicines are managed on discharge.

 Ten sites are in the implementation phase of the TCAM programme, ready for patients to start benefitting in 2019/20

# 1,100 patients benefitting

#### **ESCAPE-PAIN**

An evidence-based, group rehabilitation programme for patients with knee and/or hip osteoarthritis.

- 25 sites are adopting the ESCAPE-Pain pathway
- More than 1,100 patients benefited during 2018/19
- This is a potential ROI of £1,129,029

# 7,600 products spread/used

#### **INNOVATION EXCHANGE**

Supporting healthcare innovation to spread faster and wider across the country.

- Increasing uptake of eligible sites by 16 (94%) to deliver over 7,600 products, uses and innovations into service in 18/19, including:
  - » 3,370 SecurAcaths
  - » 2,016 Endocuffs.

### 13 RWVs scoped, 8 complete

#### **REAL WORLD VALIDATION**

Bringing a Quality Improvement approach to data analytics.

 13 real world validations scoped and 8 completed in year, enabling further spread and lessons learned for various products and services.

#### **Innovate** Issue 15

## **Focus on Four**

We take a look at four projects that have contributed to our overall impact in 2018/19.



#### Respiratory

The Kent Surrey Sussex Academic Health Science Network Respiratory Network was

formed in 2010 to improve the quality, availability and accessibility of respiratory services, and reducing unwarranted variation in the management of pathways, such as community acquired pneumonia (CAP) and chronic obstructive pulmonary disease (COPD).

By introducing separate care bundles for both CAP and COPD patients, the Network has been able to reduce the average length of hospital stay and record a fall in crude mortality rates.

Other initiatives under our respiratory work include a focus on medicines optimisation, a spirometry project looking at accreditation and variation and the KSS Oxygen Wristband project - which aims to improve the safety of care for patients at risk of oxygen toxicity as a result of an incorrect target oxygen saturation. The KSS Pulmonary Rehabilitation Clinical Network and the KSS Oxygen Clinical Network are also key parts of the programme.

Based on experience of implementing the KSS COPD Discharge Bundle, KSS PSC will be supporting PSCs with spread & adoption of the BTS (British Thoracic Society) COPD Discharge Care Bundle across their regions in 2019/20.



### **Transfer of Care Around Medicines**

KSS AHSN has been working with partners at ESHT Pharmacy, Community Pharmacy Surrey & Sussex, East Sussex Better Together and East

Sussex County Council to implement the TCAM pathway to improve the way patients' medicines are managed on discharge.

The initiative, which went live on April 1 2019, allows the hospital pharmacy team to send patient medication discharge details directly to their community pharmacist via the secure PharmOutcomes platform, vastly improving workflow and integration between care settings.

Up to 112 community pharmacies in East Sussex will be supporting this programme. They will offer prompt advice to patients about their medicines after discharge, including the offer of Medicines Use Reviews and support through the New Medicines Service.

Rebecca Sharp, Programme Manager at KSS AHSN, said: "The TCAM pathway resonates very strongly with our own approach in working collaboratively across Kent, Surrey and Sussex and KSS AHSN has a strong history of supporting the spread and adoption of new approaches and solutions.

"We are currently working on implementation with a number of other trusts across KSS."



#### **Atrial Fibrillation**

The KSS AHSN Alliance for Atrial Fibrillation (AF) aims to reduce the number of people dying from, or

being disabled by, AF-related stroke by optimising the use of anticoagulants in line with NICE CG180 guidelines.

Through its 'Detect. Review. Protect' project more than 500 Lead 1 ECG devices across the region. The portable devices are being used by a range of professionals, including health care assistants, GPs, pharmacists and nurses, to take an instant heart trace to determine whether an individual has AF – a major cause of stroke.

By the end of March 2019, 7,992 individual ECG traces had been taken across Kent, Surrey and Sussex. Of these, 793 possible cases of AF were detected, which equates to approximately 32 AF-related strokes being saved, avoiding debilitating effects on individuals and their families.



#### **Dare to Share**

KSS AHSN sponsored this project under the Darzi Fellowship in Clinical Leadership programme.

Dare to Share aims to review, support and spread innovative approaches currently being undertaken across Kent, Surrey and Sussex to learn from serious untoward incidents and learning from deaths.

Following intensive desk and field research Claire Cox, Darzi Fellow leading the work, held an event for more than 100 delegates, made up of clinicians, senior staff, citizens, investigators and CCGs/regulators.

Together they highlighted local issues around learning from deaths, which

enabled a
set of national
recommendations
to be created. These
included involving
patients and clinicians
with the investigative
team's work, standardised
competency based training,
and a standard national approach
to investigations.

Opportunities highlighted within the year-long Darzi project are now being pursued further by KSS AHSN.

Claire Cox has now joined the Patient Safety Learning charity to support them in their project to create an on line safe space for learning and discussion. We will continue to update their progress as the year unfolds.

# Placing patient safety at the heart of care

England's 15 Patient Safety Collaboratives (PSCs) is the largest safety initiative in the history of the NHS.

Collectively and individually the PSCs play an essential role in identifying and spreading safer care initiatives from within the NHS and industry, ensuring these are shared and implemented throughout the system.

Funded and nationally coordinated by NHS Improvement, each of the 15 regional PSCs are organised and hosted locally by the Academic Health Science Networks (AHSNs).

KSS PSC has made a huge impact on patient safety across the region, and is now leading on the rollout of two key national initiatives on behalf of the national PSC network.

In order to maximise impact, each PSC across the network is focusing on the same workstreams. Rather than being a stand-alone area, safety Culture and PPI work will be adopted as an integral element across each of these workstreams.

Peter Carpenter, Service Delivery Director at KSS AHSN, said that KSS PSC's success was down to its ability to collaborate with a range of partners, while taking a strategic lead in key areas.

"I'm thrilled that KSS PSC is now leading the spread work nationally on two of the four Adopt and Share projects," he said

"We have been heavily involved in the Emergency Laparotomy Collaborative and in developing the COPD Care Bundle and are pleased to be able to share our learnings with the whole network.

"We've also made huge impact through our leadership, capability and safety culture work, and I'm sure that, by placing this discipline at the heart of each workstream going forward, we will be able to further improve safety culture across Kent, Surrey and Sussex."

#### Our achievements - 2018/19

#### **Deteriorating Patients**

We are actively engaged with 100% of our acute trusts, ambulance trusts and community organisations in the adoption of NEWS2 – an early warning score.

Regional sepsis trends show a mortality rate reduction of 9.45% to 8.66% per patient (decrease of 0.79% per patient) and a bed-day rate reduction of 10.45 to 9.86 compared to 2-17/18.

#### Maternity and Neonatal Health Safety Collaborative (MNHSC)

Within our Maternity & Neonatal Safety Collaborative, 138 participants attended our Local Learning System (LLS) events. All 10 Maternity units have been represented

at our stakeholder events with excellent engagement between the PSC and 10 units across the region. Within our PReCept project, aligned to MHNSC, the KSS has increased their % uptake from 63% to 78.5% in the short space of six months.

#### **Safety Culture**

Through our Leadership, Culture & Capability workstream, KSS PSC has developed several high impact initiatives; an Improvers Network with more than 1,000 active staff benefitting from support and training in QI; a 'Serious Incident Community of Practice' which supports staff, patients and their families in learning; and a 'Human Factors in a box' training package including training on appreciative inquiry, communication and supporting the "second victim".



#### Our plans for 2019/20

#### **Deteriorating patient**

Continue to focus on deterioration across all care settings with the aim of improving recognition, escalation and management of the patient. This year the focus is in non-acute settings testing the use of NEWS2 and Soft tools in the recognition of deterioration. At the same time, we will strive to improve communication and safety netting to ensure increased safety across the healthcare system.

#### **Maternity and Neonatal**

The Kent, Surrey, Sussex Maternal and Neonatal Health Safety Collaborative Local Learning System creates a safe space for delegates to learn from each other, define what works well and why; cutting through hierarchy and bureaucracy to rapidly spread improvements. With the programme now in its final year of a three-year programme, it is expected that the three Local Maternity Systems, finally in place, will support the PSC with a new system level project and succeed as PreCePT has done this past year.

#### Safer meds

The programme will focus on improving medicines safety in care homes and problematic polypharmacy through medications reviews in these discrete care settings. The work will build on our existing work in this discipline, including reducing problematic polypharmacy and the transfer of care around medicines.

#### Adopt and share

We'll be driving work around these four national priorities, with KSS AHSN leading the national delivery of ELC and COPD:

- Precept helping to reduce cerebral palsy in babies through the increased antenatal administration of magnesium sulphate (MgSO4) to mothers during preterm labour, costing from £1 per individual dose.
   With the project in its second year, we expect to reach and sustain a >85% uptake over the year.
- ED Checklist the checklist helps to standardise and improve the delivery of basic care, including the assessment of vital signs and level of pain in the first hour of admission in emergency departments, leading to escalation of concerns in a timely manner.
- copp bundle the care bundle describes six high impact actions to ensure the best clinical outcomes for patients admitted with Chronic obstructive pulmonary disease.
- Emergency Lap 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.

# Partnership day

The Kent Surrey Sussex Partnership Day 2019 is on Friday 5 July with a theme of transforming lives through innovation.

Over the past year we've seen the release of the NHS long term plan, the announcement of a national workforce review and the Secretary of State commissioned Topol review on technology and care delivery. The direction all points towards STPs becoming Integrated Care Systems, alongside precise and personalised interventions informed by use of data, informatics and genomics.

The 2019 Partnership Day – incorporating the regular CRN partnership board – will focus on these important themes and related initiatives that span all our STPs and counties.

#### **Morning Session**

While the partnership board is meeting, in the main hall we will host a worked example of a tool kit for innovation. We have chosen mental health based on regional priorities. Delegates will hear presentations on co-design with the public and carers and how innovation can be identified. We'll also offer the perspective of industry and innovators, with examples from those innovators and products drawn from the NIA and ITP, and real world analysis of benefits. Delegates will understand more about the forward design of services that may be offered in different ways, by a different workforce, in the near future.

#### **Afternoon Session**

Speakers will include Professor Becky Malby, from London South Bank University – an expert in new models of care who also runs the taught element of the Darzi Fellowship programme – now into its 3rd year in KSS and its 10th in London. This is a great chance to hear her thoughts and offer your insights about challenges and the Darzi programme itself.

We'll shortly announce our speaker on genomics and personalised and precision medicine. We'll consider questions such as what are the investigations that people should expect and how will they be funded? What will be needed by when, what will be offered locally and what will be performed at the regional centres?

Look out too for a further announcement about our speaker on Topol and the digital workforce.

We look forward to seeing you!

Find out more and register:

KSSPartnershipDay.eventbrite.co.uk



Keynote speaker:

**Professor Becky Malby** 

Becky Malby is a Professor in Health Systems Innovation at London South Bank University, where she leads the Health Systems Innovation Lab, providing change management support to systems change work; leadership programmes for emerging leaders, network leaders and citizen leaders; the London Primary Care Quality Academies; and catalysing spread through an international network.

She has a track record in systems innovation, organisational change and leadership development in the UK and Internationally, and in leading networks. Her experience is an unusual combination of leader, manager, researcher, change agent and entrepreneur. She is known to be an energetic and enthusiastic leader of change and a forward thinker.

Twitter: @BeckyMalby

# **Upcoming events**

#### 2-3 July

#### HSJ Patient Safety Congress, Manchester

Since 2008, the Patient Safety Congress has been the UK's essential forum for those at the forefront of safety, quality improvement and clinical excellence. We champion patient safety as the organising principle of a healthcare system which is truly efficient, effective and able to offer the best experience to patients and their families.

https://tinyurl.com/y46crvv2

#### 5 July

#### KSS Partnership Day

Over the past year we've seen the release of the NHS long term plan, the announcement of a national workforce review and the Secretary of State commissioned Topol review on technology and care delivery. This event will focus on these important themes and related initiatives that span all our STPs and counties.

https://tinyurl.com/y2fy7dt6

#### 4-5 September

### Health and Care Innovation Expo, Manchester

Expo informs you about the future: it's where you'll hear the big announcements about the future of the NHS and social care, and meet the people leading transformation.

https://tinyurl.com/y498tkgr

#### 13 September

#### Leading Quality Improvement in Healthcare Masterclass, London

This one day masterclass in Quality Improvement will allow all healthcare staff to learn about QI methodology, tools to use and how to lead change.

https://tinyurl.com/y5scw3kd

#### 1-2 October

#### Healthcare Excellence Through Technology, London

HETT unites world-leading health technology suppliers with digital leaders from NHS Trusts, Clinical Commissioning Groups, national bodies and private hospitals to tackle the biggest technology-related challenges facing the industry, including IT legacy issues, systems interoperability, data security, and overcoming financial pressures.

https://tinyurl.com/y2j727qz

Get in touch

innovate@kssahsn.net

**Kent Surrey Sussex** 05/07 **Academic Health Science Network** 2019 Transforming through movation

Kent Surrey Sussex Partnership Day 2019

**Venue: Hilton London Gatwick** 

Register: KSSPartnershipDay.eventbrite.co.uk