



Turning great ideas into positive health impact

A guide to Eastern Academic Health Science Network



Because we want great ideas to make the biggest impact”

Piers Ricketts,
Eastern AHSN Chief
Executive and Chair
of the AHSN Network

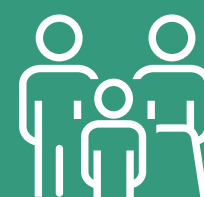
Our purpose is to turn great ideas into positive health impact

We believe that health is improved by great ideas, but great ideas only make an impact when they are put into practice. Our health is too important to leave change to chance.



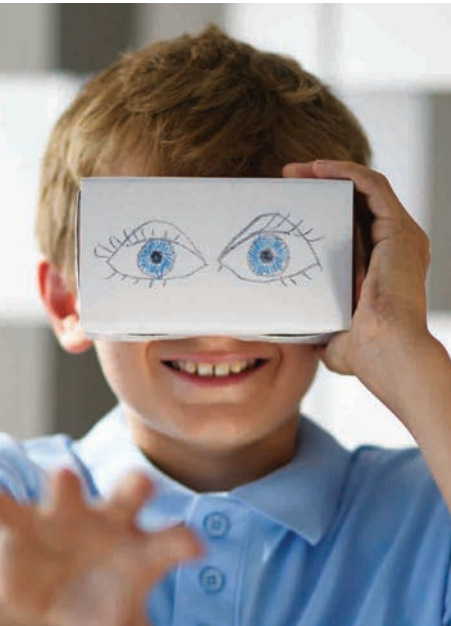
Citizens, academia, health services and industry will achieve more working together than they will in isolation. Our job is to make this happen. We do this by helping innovators navigate complex systems, generate value propositions and convene stakeholders to overcome challenges together.

The Eastern region is home to the largest health and life sciences cluster outside the US and some of the most brilliant health and care practitioners in the world. We want our region to benefit from both, creating better health outcomes and more prosperity.



We are ambitious for patients and committed to applying evidence to make change happen.

Introducing Eastern AHSN



Eastern AHSN was established by the NHS to **convene** all partners in the health sector, to **develop** and **deliver** innovative solutions in health and care. Our focus is the East of England, but we are part of a national network which enables us to deliver at scale.

We help innovators to navigate complex systems, generate value propositions and convene citizens, academia, health services and industry to realise the value of innovations quicker.

Whoever you are, if you're interested in how we take healthcare forwards in the 21st century, this guide is for you...

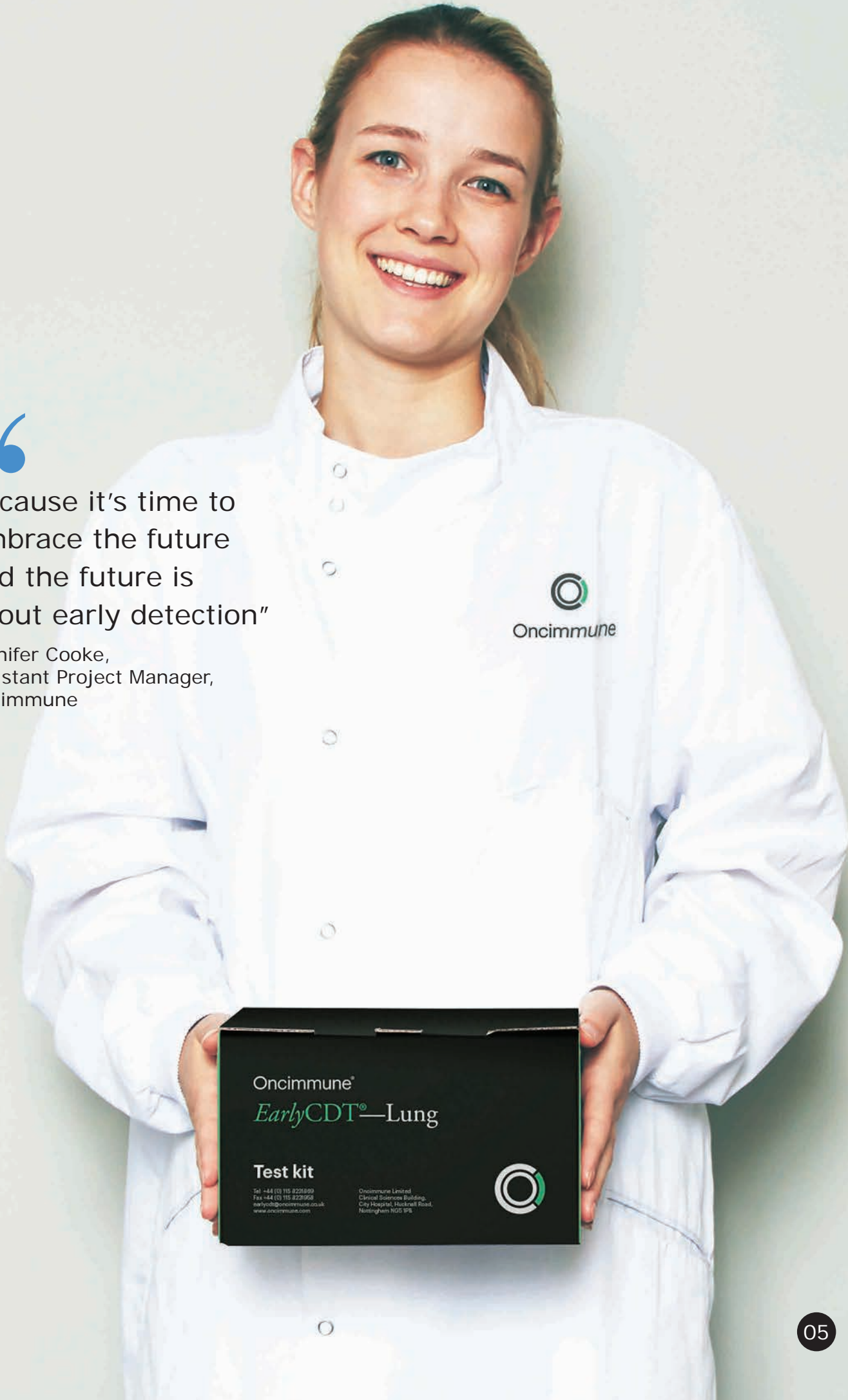
Contents

- 06 The national AHSN Network
- 07 Innovation and the NHS: shortening the time to value
- 08 From insight to implementation
- 11 We convene...
- 13 We develop...
- 15 We deliver...
- 16 Our region: a unique ecosystem
- 18 Our business strategy – priority focus areas
- 20 Our business strategy – priority enablers of change
- 22 Get involved

“

Because it's time to embrace the future and the future is about early detection”

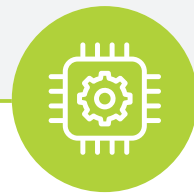
Jennifer Cooke,
Assistant Project Manager,
Oncimmune



The national AHSN Network

The national AHSN Network is funded by NHS England, NHS Improvement and the Office for Life Sciences to enable the adoption and spread of national innovations and patient safety programmes. The network is:

- A bridge between national impact and local delivery
- Embedded into local systems – working across sectors to understand and respond to needs
- Connected – taking what works locally and spreading nationally
- A broker between the NHS and industry and a trusted partner to signpost to solutions



As well as focusing on the East of England, Eastern AHSN leads on MedTech for the national AHSN Network thanks to the extensive MedTech expertise and activity in the region. The East of England employs 16.2% of total national life sciences employees, with 1,235 employees having joined the region's core MedTech sector between 2009 and 2017. Cambridge is the largest technology cluster in Europe.



Innovation and the NHS: shortening the time to value

Now more than ever is the time for the AHSN Network.

- We see opportunities and remove barriers
- We understand how to embed innovations into complex health systems
- We are working to create a single 'front door' to the innovation ecosystem

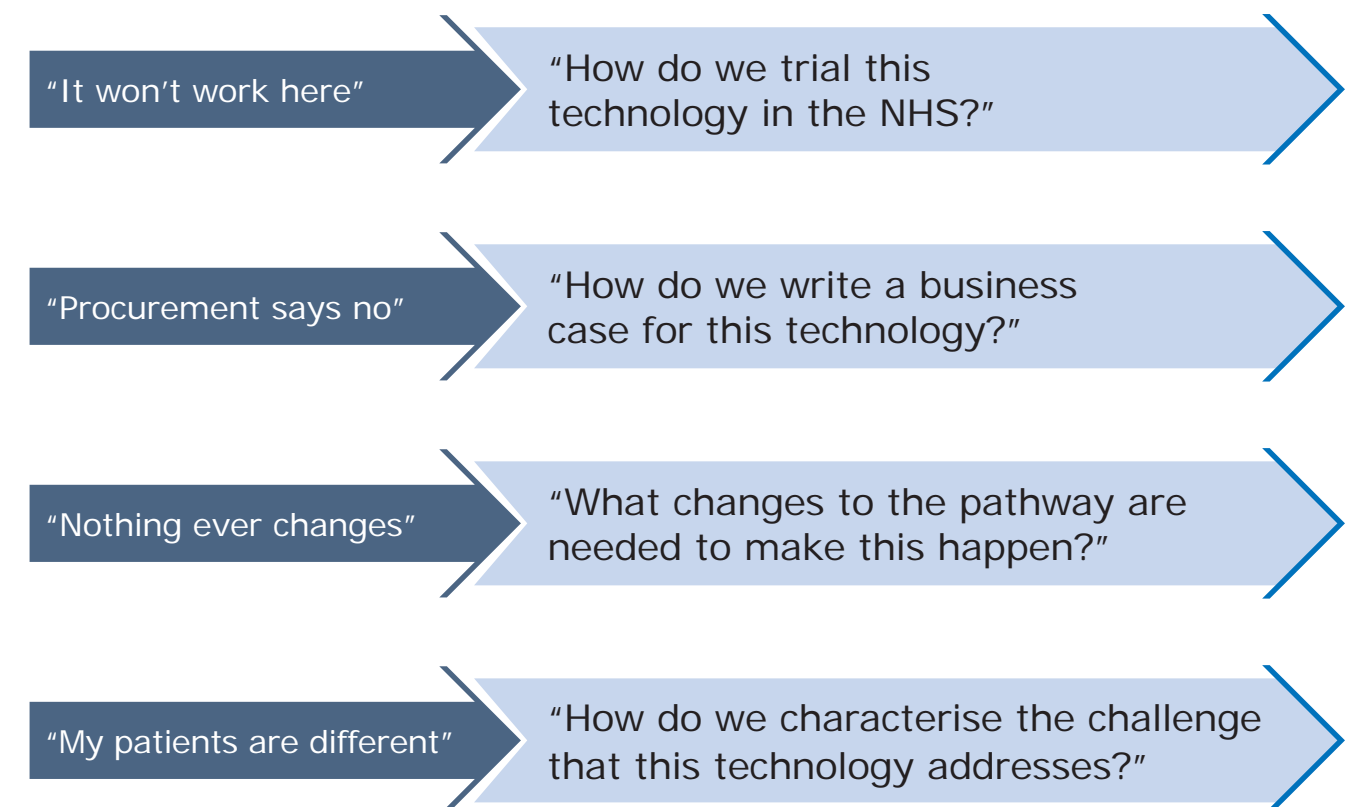
Even though the NHS innovates well, the pace of adopting change can be slow. The time lag between the emergence of an innovation and its widespread use is an average of 17 years before the true value of that innovation can be realised for patients.

Barriers that get in the way can be:

- Perceptual
- Cultural
- Practical
- Resource-related

Innovators do not always understand how the NHS works and the how different systems, processes and people need to be aligned for change to happen.

By understanding and listening to the needs of our partners and stakeholders, we can work together and turn challenges into opportunities.



From insight to implementation

From insight to implementation, we convene the right people to develop great ideas and deliver positive health impact.



INSIGHT

We convene the right people to characterise healthcare challenges and gain deep understanding of the opportunities and barriers that may stand in the way of change.

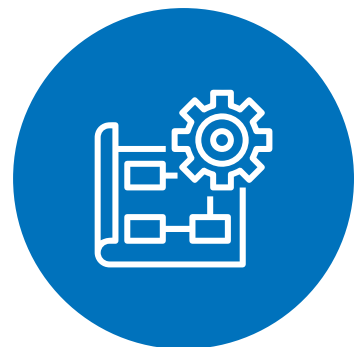
We hold innovation exchange events throughout the region. They are designed to convene innovators and industry with people in health and care to develop ideas and kickstart partnerships that meet healthcare needs in our region.



IDEA

We help anyone with a great idea to develop it into a workable, evidence-based solution that will deliver outcomes in real-world practice.

We run a series of free NHS Readiness and Scale-Up Academy events across the region to help innovators prepare for conversations with NHS stakeholders, investors and funding bodies, so they can take their ideas forward. We also offer tailored one-to-one sessions.



IMPLEMENTATION

We help innovators navigate complex systems and generate value propositions, support healthcare providers to adopt innovations into practice and provide a framework to adopt and scale projects at a national level.

Our HealthTech landscape review and procurement toolkits provide the knowledge innovators need to navigate the innovation pathway and new NHS procurement landscape. They also include relevant contacts to advise on the decision process and what a successful tender to the NHS should contain.



IMPACT

Our programmes deliver measurable positive health impact, creating better health outcomes and more prosperity for everyone.

We adopt and spread national AHSN programmes, such as PrECePT (Prevention of Cerebral Palsy in Pre-term Labour). This programme reduces cases of cerebral palsy by giving magnesium sulphate to at-risk women in pre-term labour. In our region, we have achieved 85% uptake.



Because we want to transform the lives of millions around the world by giving them the benefits of minimal access surgery"

Mark Slack,
Chief Medical Officer,
CMR Surgical



“

Because cancer patients deserve the best chance of success”

Irene Debiram-Beecham,
Principal Research Nurse
for Early Detection and
Cytosponge Trials

We convene...

We believe citizens, academia, health services and industry will achieve more working together than they will in isolation.



We bring the right people together to create the right conditions for collaboration

We share diverse perspectives to shape the future of health and care

We build lasting partnerships to deliver maximum benefits for all

“



Mental health and healthy ageing are key issues for the NHS in the Eastern region. Many of the innovations to help solve these health challenges involve Artificial Intelligence (AI), but it takes real people to develop and integrate the machine learning behind this. This is where Eastern AHSN can help...”

DR LOUISE JOPLING,
COMMERCIAL DIRECTOR,
EASTERN AHSN

Alongside Cambridge Judge Business School, The Bradfield Centre and industry partners, we recently sponsored a programme to help innovators develop ground-breaking AI solutions in mental health and healthy ageing, called MedTechBOOST. The challenge statements for both healthcare themes were developed in partnership with clinical and patient groups to ensure that a true clinical need was identified to maximise the future potential for uptake within the NHS.

Over the five day event innovators benefited from both networking opportunities and intensive practical support to help turn their ideas into business propositions, prototypes and ensure that the requisite expertise exists within their team. We are excited that many of the teams that were part of our 2019 programme have remained working together and we continue to support them to help take their innovations forward.

In the past five years, we have supported over 17 health innovations to be adopted in the local health system and awarded 57 contracts to companies involved. Our work is not only improving patient care and taking the NHS into the future, we're aiding economic growth in the region too.

“

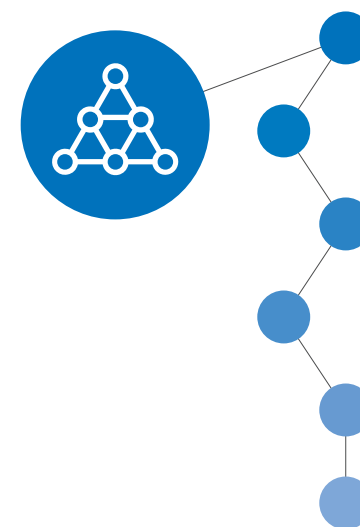
Because good ideas, combined with the right direction and a culture of learning, can save lives”

Alana Hunt, Quality Improvement Lead, James Paget University Hospitals NHS Foundation Trust



We develop...

Health is improved by great ideas, but great ideas only make an impact when they are put into practice.



We provide the know-how to take ideas forward in complex health systems

We develop compelling value propositions and evidence

We match our brightest people with the smartest ways to make an impact

We create a culture where good ideas come alive

We unlock funding to make change happen

We spread great ideas across the Eastern region and beyond

“



For many years now, hospital staff in the NHS have relied on pagers to let them know they were needed in a different part of the hospital. As a clinician,

I knew there had to be a better digital alternative that could save time and bring this essential tool up-to-date...”

DR SANDEEP BANSAL,
MBBS, PGDIP, FOUNDER AND
CEO MEDIC CREATIONS

MedicCreations and West Suffolk NHS Foundation Trust teamed up with Eastern AHSN to pilot the MedicBleep app – a digital alternative to out-dated pager technology.

Medic Bleep was invented by a clinician who experienced the frustration of using pagers – a one-way communication method where the recipient is unaware who is bleeping, why, or the level of urgency. A two-way secure system that meets NHS information governance requirements was needed. MedicBleep now allows hospital and community staff to communicate in real-time, sharing vital information efficiently and securely.

Our latest evaluation of the app found that it can save junior doctors 48 minutes and nurses 21 minutes per day, freeing up time to care for patients. In West Suffolk this could equate to £4.5 million in potential savings through freeing up the equivalent of 18 full time nurses and 18 full time junior doctors per annum.

The need to replace pagers has been highlighted by Matt Hancock, Secretary of State for Health and Social Care and we are working with MedicBleep to support their scale-up.



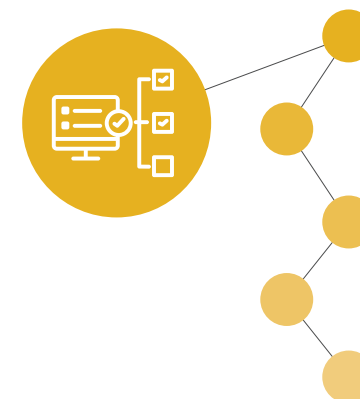
“

Because innovation is often about adopting existing good practice consistently, rather than just new inventions”

Helen Pardoe, Associate Medical Director Quality Improvement, Consultant Colorectal Surgeon, Princess Alexandra Hospital NHS Trust

We deliver...

The Eastern region is home to the largest health and life sciences cluster outside the US and some of the most brilliant health and care practitioners in the world.



We adopt and spread the national AHSN programmes

We import ideas and creativity from other industries

We encourage health services to embrace the future

We mobilise leaders to champion change

We build a lasting legacy for health and care including our national patient safety programmes

“



Atrial fibrillation is a heart condition that causes an irregular and often abnormally fast heart rate. It's a major risk factor for stroke, but around 400,000 people don't know they have it. The SOS-AF service has been working closely with Eastern AHSN. In the first year, we screened around 15,000 inpatients, identified 400 people with AF and prevented around 16 strokes, saving the NHS over £350,000.”

DR ISURU INDURUWA,
STROKE SPECIALTY REGISTRAR,
CAMBRIDGE UNIVERSITY HOSPITALS
NHS FOUNDATION TRUST

As part of our national stroke prevention programme, we've distributed around 600 mobile ECG devices to enable GP practices, hospitals, and community services to identify patients with suspected atrial fibrillation (AF). As well as running training events for clinicians, we've also supported the Stroke Department at Cambridge University Hospitals to establish the Screening and Optimising Stroke Prevention in AF (SOS-AF) service to screen medical inpatients. This initiative has successfully prevented a number of AF-related strokes and was shortlisted for the prestigious British Medical Journal Awards and recognised in the AF Association Healthcare Pioneers Report 2019.

“

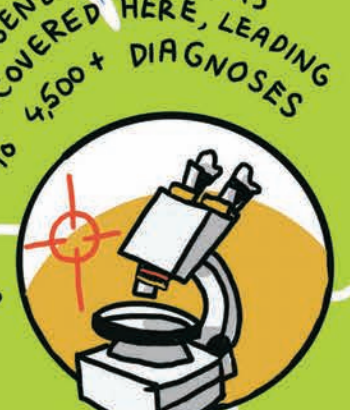
Strokes caused by AF tend to be more disabling than other strokes, but their risk can be reduced by medications. With support from Eastern AHSN, medical admissions are now routinely screened for AF by our specialist nurse team. We then assist our primary and secondary care colleagues in anticoagulant management by promoting current guidelines, optimising medications, and breaking down any prescribing barriers.”



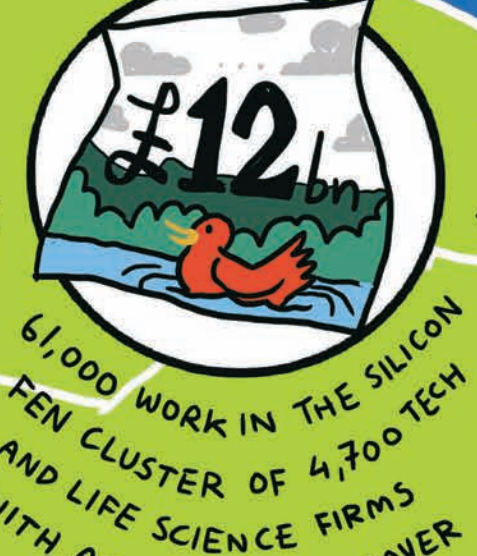
PAULINE HOUGH, SOS-AF
SPECIALIST NURSE, CAMBRIDGE
UNIVERSITY HOSPITALS
NHS FOUNDATION TRUST

Our region: a unique ecosystem where ideas make an impact

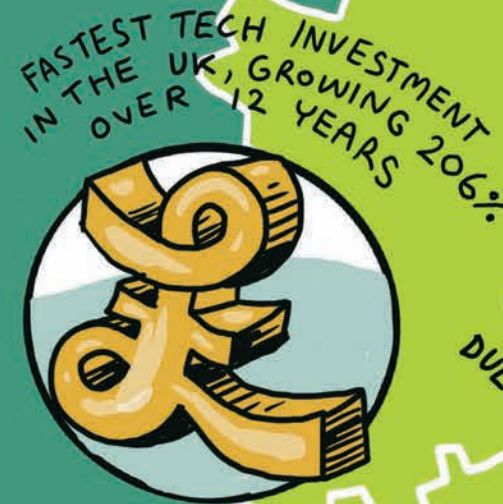
A UNIQUE ECOSYSTEM FOR RESEARCH AND DEVELOPMENT



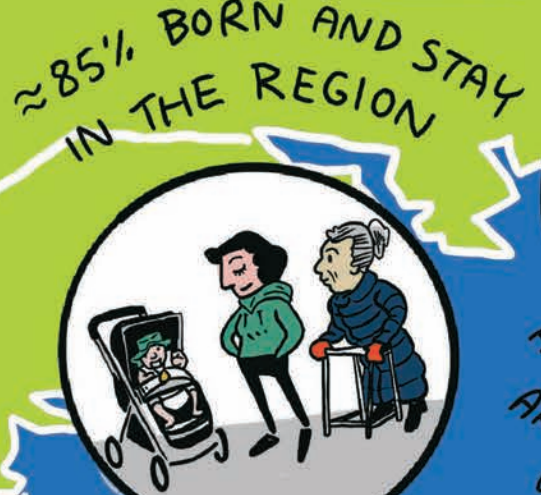
WORLD-LEADING HEALTH AND TECH.



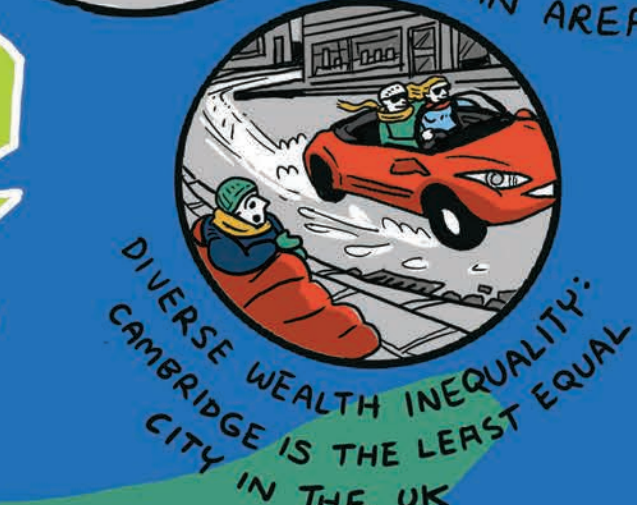
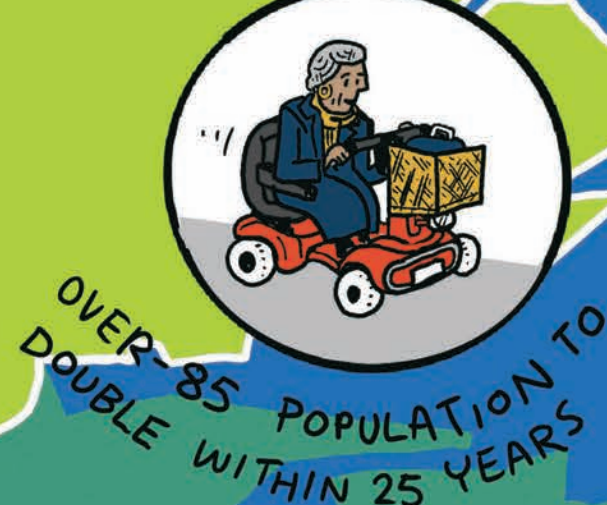
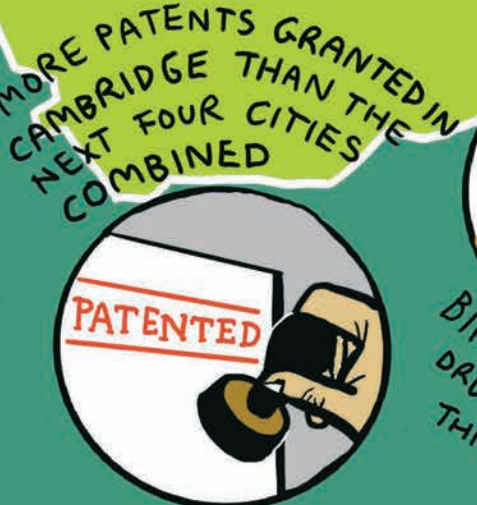
A PROSPEROUS AND GROWING REGION



A LARGE POPULATION WITH DIVERSE HEALTH NEEDS



A PROUD HISTORY OF INNOVATION

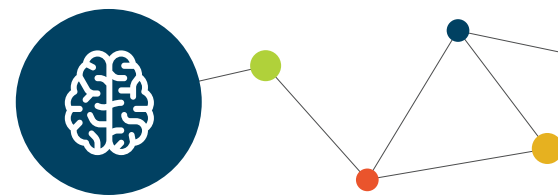


Our business strategy

Priority focus areas

We spend roughly half of our time on the adoption and spread of the national programmes delivered by the AHSN Network.

We spend the other half on areas of health consistent with the priorities set out in the NHS Long Term Plan and in the Eastern region and the areas where our region is best placed to make major advances. Following consultation across our region, we have defined four priority areas of greatest health need. The key enablers of change are set out on page 20.



MENTAL HEALTH

The NHS Long Term Plan sets out a welcome emphasis on improving mental health services, in particular for children and young people. One in nine children between the ages of five and 15 has a mental health disorder. And we know that half of all mental health problems are established by the age of 14, with 75% of problems established by the age of 24. This has a huge impact on young people's life chances and consequently on their families and the wider economy. At the other end of the life course, dementia is now among the top five causes of early death.

At Eastern AHSN we are already supporting a number of innovations in this area. We recently ran an innovation exchange event on suicide prevention and are now working on the development and evaluation of four innovative services to support people in crisis. We ran the MedTechBOOST programme to attract and support early stage AI innovations to address mental health challenges for our region. We also work closely with the NIHR-sponsored Applied Research Collaborative (ARC) on research projects to identify relevant interventions in mental health in some of the most economically-challenged parts of our region.



CANCER

The NHS Long Term Plan has set a target for 75% of cancers to be diagnosed and treated at stages 1 and 2 (currently 50%). Importantly, Cambridge is a world-leading centre for the development of new drugs and treatments for cancer, so we are working to accelerate the uptake of promising early treatments into our NHS.

At our last cancer innovation exchange to help identify solutions for early diagnosis and treatment with our local NHS partners we selected innovations in for evaluation across the region. This includes a test to help detect oesophageal cancer without resorting to an endoscopy.

We will also work with our region's Cancer Alliance, clinicians, patients and innovators on data analysis and new diagnostics to improve treatment times.



RARE DISEASES AND PERSONALISED MEDICINE

The science of genomics has huge potential to pinpoint the right treatment for an individual patient. Our region boasts world-leading science in this area.

We supported the use of a proprietary rare diseases diagnostic platform in one of our local Clinical Commissioning Groups (CCGs). We co-led a consortium in a successful bid for a grant from Health Data Research UK (HDR UK) to build a cloud-based platform to house secondary care data, genomic and imaging data for 1,600 patients with three rare diseases, all secured and anonymised so that it could be used for research to find new treatments for these diseases. The next stage of the platform will be to support patients with inflammatory bowel disease, following the consortium's award of a major grant for Gut Reaction, one of seven Health Data Research Hubs set up to maximise the insights gained from health data. We will continue to support selected innovations which explore the use of data to speed up the diagnosis and treatment of comparatively rare diseases.



LIVING AND AGEING WELL

Over the next decade the number of people aged over 85 is projected to increase from 1.3 million to 2 million in the UK. Services are already becoming overwhelmed and social care is under-funded. It is widely accepted that the solution rests in supporting the older population to age well, concentrating on enabling health regimes, supported by assistive technology as people become less mobile.

We are prioritising the uptake of innovations that support older people to achieve more years free of preventable disability through:

- Sustaining physical activity
- Supporting age-friendly homes
- Healthy and active places
- Supporting social connections and self-care
- Supporting people with multiple co-morbidities

All of our priority areas are set in the context of the prevention and wellbeing agenda, as the future of our NHS will not be secured simply by improving our hospitals but by supporting patients and the public to manage their lives and health conditions through better understanding of the resources available to them, including technology.

Our business strategy

Priority enablers of change

The solutions to the key issues facing our health and care system are being realised in three enabling areas:



THE NHS WORKFORCE

The health and care workforce faces the same issue the world over, namely insufficient qualified professionals to meet increasing demand. In line with the NHS Long Term Plan and the Health Education England Topol Review, we firmly believe that the adoption of digital and other technologies can support the workforce in this period of increasing demand.

We are supporting new technologies to free up our workforce, making the best of their skills and expertise to address healthcare challenges. Through technology such as MedicBleep, which replaces outdated pagers with a time-saving mobile app, and the advent of expanding technologies such as clinical decision support tools and robotic surgery, we are able to create efficiencies and keep our incredible healthcare teams working at the top of their game.



PUBLIC AND PATIENT INVOLVEMENT

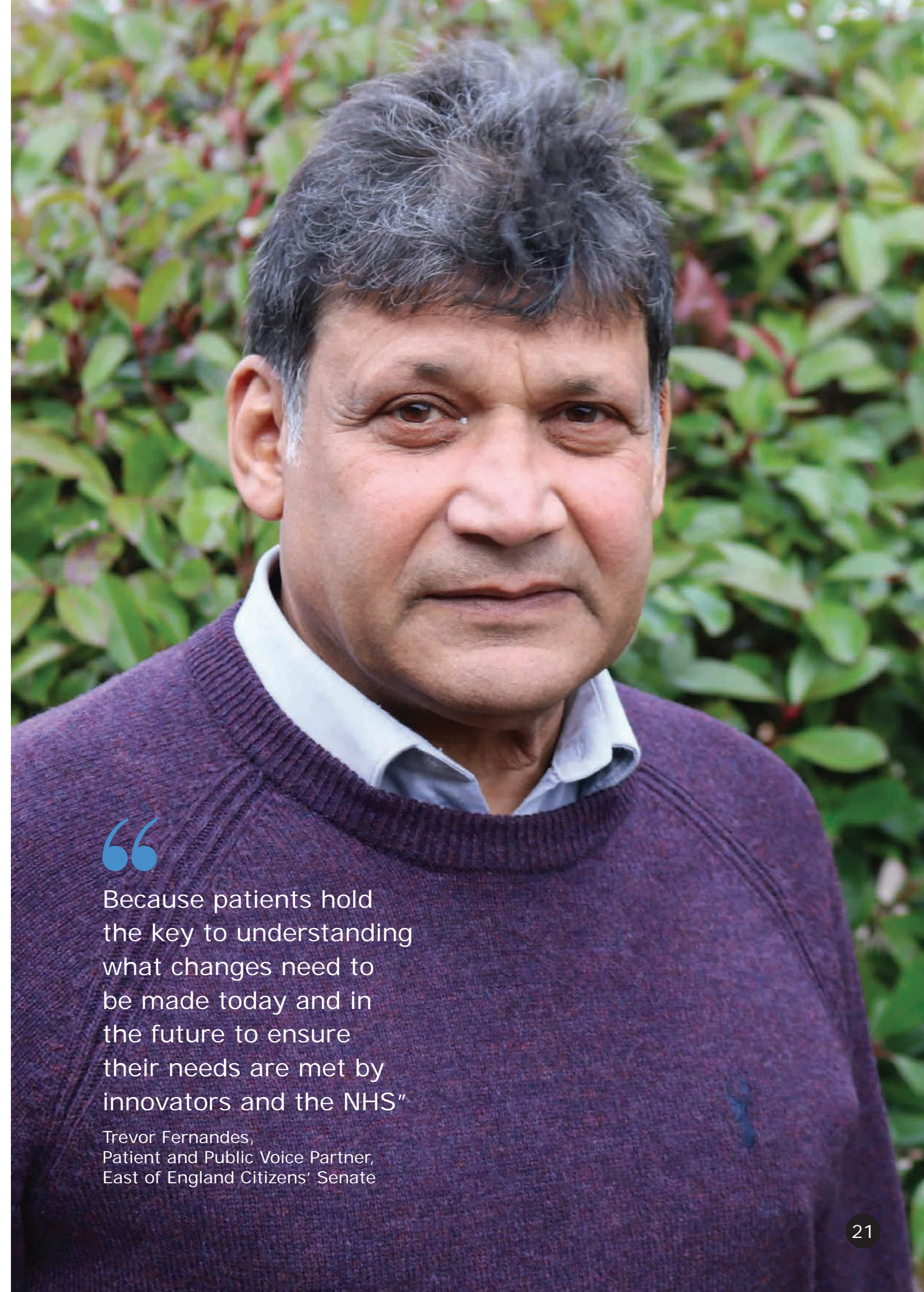
We work closely with patients and the public to ensure their voices inform and shape what we do. We do this, not only because it's the right thing to do, but also because it can help accelerate innovations through the system.

We continue to build a strong partnership with the East of England Citizens' Senate which plays an important role to ensure that citizens' views are at the heart of the development of health services in our region. Recently, we have also funded the development of a participatory appraisal programme where we recruited and trained citizens from diverse and non-traditional backgrounds and minority groups to run workshops in their communities to elicit views on different health and care issues. The team has recently completed its first programme, supporting aspects of the design of the proposed healthy new town at Northstowe.



DIGITAL

Digital technology is a fundamental part of everything we do. We are supporting the development and roll-out of fundamental digital infrastructure through our participation in the Eastern Region and the Cambridgeshire & Peterborough integrated care records. We are also supporting apps and digital technologies through a number of accelerator programmes that connect innovators with industry experts and NHS stakeholders, such as at our FutureTech roadshows and MedTechBOOST events. Initiatives such as Just One Norfolk, an award-winning platform we supported to increase access to health services for children and young people, are already making a real difference to people throughout the region.



Because patients hold the key to understanding what changes need to be made today and in the future to ensure their needs are met by innovators and the NHS"

Trevor Fernandes,
Patient and Public Voice Partner,
East of England Citizens' Senate

Get involved

We can achieve more working together, so we're dedicated to creating an environment that enables and encourages collaboration.

ARE YOU AN INNOVATOR?

We're here to help bring your ideas closer to the NHS, academia, industry, researchers and patients. We can share insight on the kind of innovations we need the most, and how your idea fits in. We can help you navigate the innovation cycle and map your pathway to deliver real health impact.



ARE YOU A CLINICIAN?

We're working hard to ensure you have faster access to the latest innovations and technologies, so you can deliver excellent patient care. We can connect you with industry and innovators so you can help them to develop the solutions we need to some of the most pressing problems in the NHS today.

ARE YOU A RESEARCHER OR ACADEMIC?

Turning your research and expertise into reality is important to keep healthcare moving forwards. We can help you with commercialising your ideas, help to facilitate partnerships and link you with entrepreneurship schemes.



ARE YOU A PATIENT?

Your experience of the health service is invaluable, and some of the best ideas come direct from people who've lived it. We can provide routes for you to share your ideas and insights with people that can develop real health solutions. Through our work, we can help you access the latest innovations in healthcare.

“

Because great ideas that can transform patient experience often come from personal experience”

Chris Evans,
anaesthetist trainee and
Founder, Little Journey



Keep in touch with our work

Eastern AHSN



@EasternAHSN



Eastern AHSN



EasternAHSN.org



Eastern **AHSN** 

Part of
The **AHSN** Network