

A photograph of a woman holding a baby, with a healthcare professional examining the baby's arm. The image is overlaid with a semi-transparent blue geometric pattern of triangles and squares. The text 'INNOVATION INTO ACTION' is centered over the image in a large, white, bold, sans-serif font.

INNOVATION INTO ACTION

Supporting delivery of the NHS Five Year Forward View



FOREWORD

The NHS Five Year Forward View makes a compelling case for greater ambition in the transformation of healthcare services by 2020 – building on a proud history of healthcare innovation in the NHS.

This document provides a snapshot of the wide variety of innovation, activities and system-wide partnerships underway across the NHS to support the delivery of the NHS Five Year Forward View. It offers some examples of the ways in which these different initiatives can be deployed together to make a bigger difference.

Supporting innovation across the healthcare system is more important than ever, and will be central to securing transformation and improved patient outcomes. Creating the conditions for more collaborative approaches to innovation, and enabling the fast adoption of cost-effective new technologies will be key.

Our shared vision for the health service of the future, as also described by the National Information Board, is an NHS characterised by digital tools benefitting and empowering patients and clinicians alike. Innovation will play a large part in this vision being realised.

There are many and diverse NHS innovation programmes, but each has in common, a strong connection to the NHS Five Year Forward View's core principles, which are:

- Closing the health gap.
- Closing the care and quality gap.
- Closing the funding and efficiency gap.

From the [Small Business Research Initiative](#), which provides grants to small and medium-sized enterprises (SMEs) to solve NHS identified problems, to the [New Care Models](#) leading the way in new forms of integrated care which will become blueprints for the NHS as a whole, innovation is integral to all our work. Meanwhile, longer-term initiatives like the [100,000 Genomes](#) programme are delivering results of their own, and are setting the standard for NHS innovations yet to come.

In the following pages, we describe some of these initiatives and NHS England's plans to build on the progress so far. In doing this we want to stimulate further thinking and interest, and to encourage you to explore, or get involved in individual projects. Alongside project summaries, we have also provided a link to just a sample of the many case studies of innovative devices, services and ideas which are delivering benefits to patients.

Healthcare innovation is constant; from single devices transforming patients' experience of care, through to large-scale projects which reimagine the way in which treatment itself is delivered. From established initiatives such as the [Friends and Family Test](#) and [NHS Choices](#), as well as developing initiatives such as [Integrated Care Pioneers](#) and [Clinician Entrepreneurs](#) – innovation in the NHS is everybody's business.

CLOSING THE HEALTH GAP

To lessen the burden of ill health, the NHS must refocus its efforts on evidence-based prevention initiatives, acting on challenges to people's health and wellbeing by encouraging behavioural change.

For example, the [NHS Diabetes Prevention Programme](#) will in its first year recruit 10,000 people at risk of Type 2 diabetes into behavioural change programmes. In a similar vein, the [Healthy New Towns](#) programme will create place-based initiatives keeping people well and living healthier lives.

Developments in innovation which are contributing to closing the health gap are not confined solely to physical health. Two [Academic Health Science Networks](#) (AHSNs), for instance, have collaborated to produce a redesigned, integrated care pathway for schizophrenia, building on approaches more commonly used in stroke care. Imperial College Health Partners and the Wessex AHSN worked with a number of partners to identify treatment goals in psychosis as early as possible, and to offer treatments designed to prevent relapses and promote recovery.

Innovative [digital technologies](#) are playing an important part in empowering patients to manage their own health at their convenience, and programmes like the [Promoting Health Apps](#) and [Widening Digital Participation](#) are helping these innovations to reach more people. Examples include The Big White Wall, one of the first services to be endorsed by the [NHS Choices](#) website, and which was backed by NHS England's Regional Innovation Fund. The service, which addresses mental health and wellbeing issues, offers users secure, anonymised access to a novel combination of peer support and professionally-trained therapists. Users' feedback is adding to the growing body of evidence which points to the effectiveness of mental health services delivered online. The success of the Big White Wall confirms the extent to which many people welcome more flexible, 24/7 services.

In the longer term, the work of the [100,000 Genomes](#) project will provide important insights for new possibilities in diagnoses, more effective treatments, and further medical research with potentially far-reaching benefits for patients. This cutting-edge programme is already driving innovative transformational change in the way NHS organisations are working together in networks, linked through new developments in informatics, laboratory and clinical services, supported by academic partners including AHSNs.

CLOSING THE CARE AND QUALITY GAP

For the NHS to continue to meet patients' changing needs in the 21st century and remain clinically and financially viable, there must be a collective effort across the system to tackle variation in quality and outcomes. We need a set of innovation tools which, individually and collectively, support the required step-change.

Very often these innovations come direct from within the service, from practising clinicians. For example, Dr Dharmesh Kapoor, Consultant Obstetrician and Gynaecologist at the Royal Bournemouth Hospital, contacted NHS England through [Innovation Connect](#), our online support service, about the EPISCISSORS-60, a device he had co-developed in his clinical practice. These fixed-angle scissors reduce injury in episiotomy during childbirth, offering a markedly improved quality of life for new mothers.

Dr Kapoor was directed towards a funding scheme, in this case the Regional Innovation Fund, to enable further hospitals to trial the device, which ultimately resulted in NICE backing in July 2015, through a [MedTech Innovation Briefing](#). These NICE briefings are funded by NHS England and offer relatively concise and rapid assessments of selected innovations, with the aim of making relevant information available quickly to clinicians, to support rapid adoption where this is appropriate.

Dr Kapoor has been selected as a Fellow in the new [NHS Innovation Accelerator](#) (NIA) programme, whose practical and financial backing helps proven innovators to get their ideas adopted at scale and pace.

Sometimes the quality gap is closed by innovative ways of organising care, such as those being led by the [New Care Model Vanguard](#)s. A multi-agency partnership in Wakefield is helping to join up services for 63,000 older people living in supported housing or care homes. In Calderdale, new [Multispeciality Community Providers](#) are focusing on moving specialist care out of hospitals into the community, closer to home. Elsewhere, a number of areas are pioneering new approaches to urgent and emergency care, including innovations in workforce planning and making effective use of digital reporting tools.

Meeting the challenge of closing the care and quality gap requires both single-issue innovations that improve the quality of a particular patient group's care, and system-wide innovation supported by the [Academic](#)



Health Science Networks, care.data and the National Information Board's Interoperability Strategy. A further crucial element of closing the care and quality gap will be innovations working in combination with one another. Test Bed sites will be central to evaluating the impact of new technologies which are implemented alongside novel approaches to care.

What all of these programmes emphasise is the sharing of ideas and information, working collaboratively and breaking down organisational barriers.

CLOSING THE FUNDING AND EFFICIENCY GAP

The NHS Five Year Forward View sets out the scale of the current productivity challenge, and suggests viable options to meet this challenge. The NHS must realise the maximum value for patients and the public from every pound invested.

The Small Business Research Initiative for Healthcare (SBRI) is just one example of the collaborative innovation efforts helping to address this gap. The SBRI is being actively championed and promoted by AHSNs, who co-ordinate the programme and ensure maximum clinical input. This has the effect of potential solutions being “pulled” rather than “pushed” into the NHS.

For example, one innovation supported by the SBRI, from its initial proof of concept through development to market readiness, is the Noctura 400, a light therapy sleep mask designed to prevent and treat diabetic retinopathy. Diabetes remains the most common cause of preventable adult blindness in the developed world. From the 3.5 million people currently suffering with diabetes in Britain, patients who develop retinopathy are treated at a cost of as much as £10,000 per patient for each eye. For individual patients, the Noctura 400 can effectively reverse eye disease, with a minimally invasive treatment that improves patient experience, and has received extremely positive feedback in clinical trials. Take up of the Noctura 400 has the potential to make a significant reduction in the annual £1bn NHS spend on this condition.

The NHS Innovation Challenge Prizes are also contributing to this work by incentivising frontline staff to put solutions forward, and encouraging the rapid spread of the best ideas through the wider healthcare system.

Digital technologies are also having a beneficial impact on efficiency among healthcare providers. Wye Valley NHS Trust is implementing openMaxims, an electronic patient records and administration system. The system, once rolled out in full, will incorporate enhancements such as diagnostics reporting, electronic discharge summaries and scheduling for beds, tests and theatres. Besides its cost-effectiveness, the system's improved functionality will allow clinicians to make more informed and timely decisions about patients' care.

Other innovative solutions will be key to a financially sustainable NHS. These include the time saving technologies funded by the [Nursing Technology Fund](#), and changing the relationship between patients and their care through better, more timely and relevant information such as [Digital Primary Care](#), [MyNHS](#) and the [Summary care record](#).



- Diabetes Demonstrators – 7
- Integration Pioneers – 25
- Vanguards – 37

CLINICAL ENGAGEMENT

Clinician Entrepreneurs

The Clinician Entrepreneurs programme, launched at the Health and Care Innovation EXPO 2015 by the programme sponsor Sir Bruce Keogh will enable clinical staff to develop their technological and commercial skills as part of their professional training.

The programme will be the first national level training programme for clinician entrepreneurs and will become a global beacon creating a “brain gain” effect, attracting and retaining the brightest talent for the NHS. Protected time for innovation as part of professional clinical training and the creation of substantive clinician entrepreneur posts across the whole healthcare landscape will enable medics, nurses, Allied Health Professionals’ (AHPs) and scientists to directly influence the fast-changing environment they work in.

For more information contact:

✉ england.innovation@nhs.net

Continuing Clinical Innovation scheme

NHS England is supporting a new scheme to allow clinical staff to record innovation and improvement activity they are involved in as a routine part of their continuing professional development (CPD).

The scheme, the first of its kind, will open opportunities for front line innovators and enable NHS Trusts to quantify and measure how much frontline innovation goes on in their organisation. It will encourage the establishment of new networks of innovators and entrepreneurs; allow clinical staff to use the points gained in re-validation and re-registration processes; drive the spread and adoption of innovative care that will improve patient outcomes and quality of care and; help to reduce the level of variation in treatment.

For more information contact:

✉ england.innovation@nhs.net

Innovation Challenge Prizes

The NHS Innovation Challenge Prizes encourage, recognise, reward and celebrate front line innovation, and drive spread and adoption of these innovations across the NHS.

We all know that invention has never been a problem for the NHS. Every problem, has a solution, and most of these are discovered by our frontline staff.

Over the last four years the NHS Innovation Challenge Prizes have helped to encourage, recognise, reward and celebrate frontline innovations promoting the wider adoption of the best ideas in order to benefit patients and close the health, wellbeing and efficiency gaps.

The NHS Innovation Challenge Prizes has offered both financial reward and professional development and support opportunities for successful applicants from the likes of Janssen, 3M, Accenture, Health Fabric, HSJ and the Allied Health Professions Federation to support the spread and adoption of the winning innovations. Only NHS organisations in England can apply for a prize i.e. the lead applicant and applications are open from the autumn.

For example in Southend Hospital the NHS Innovation Challenge Prizes have supported the adoption of a new referral system for patients suspected of having a transient ischaemic attack (TIA) which has led to 96 per cent of patients being seen in a timely fashion compared with 17 per cent beforehand. Seven other Trusts are now implementing the same system.

For more information contact:

✉ england.challengeprizes@nhs.net

🖥 www.nhschallengeprizes.org

CLINICAL EVALUATION

Commissioning through Evaluation (CtE)

The CtE programme enables patients to access promising new treatments which are not routinely commissioned, whilst new data is collected within a formal evaluation programme, potentially leading to the development of a clinical commissioning policy for future use. The CtE programme is testing an innovative approach to evaluating potentially promising specialised treatments, but for which there is currently insufficient evidence available to support routine commissioning within the NHS.

The £25m programme is currently evaluating the following treatments:

- Stereotactic Ablative Radiotherapy (SABR) for wider forms of cancer than non-small cell lung cancer, which will run for up to three years.
- Percutaneous mitral valve leaflet repair using MitraClip for mitral regurgitation for patients with heart failure.
- Patent Foramen Ovale Closure for the prevention of recurrent stroke.
- Left Atrial Appendage Occlusion for the prevention of stroke.
- Selective Dorsal Rhizotomy (SDR) to reduce spasticity by decreasing sensory stimulation whilst preserving voluntary movement.
- Selective Internal Radiation Therapy (SIRT) for the treatment of unresectable primary and secondary liver cancer.

Each scheme has been developed with the support of national clinical experts and patient representatives. The scheme enables a small number of procedures to be funded, within a limited number of selected centres, and within a limited time-frame, while evidence on the relative clinical and cost effectiveness of the procedures is gathered and compared to other treatments already available in the NHS.

The National Institute for Health and Care Excellence (NICE) is supporting NHS England in the evaluation of the schemes.

For more information contact:

 www.england.nhs.uk/commissioning/spec-services/npc-crg/comm-eval/

Innovation Score Card

The Innovation Scorecard is intended to aid transparency around the usage of treatments recommended by NICE. By monitoring uptake of NICE's technology appraisals, the Scorecard aims to create more consistency across the country in the adoption of NICE guidance, and to reduce unacceptable levels of variation in the extent to which patients are able to ultimately access innovative treatments.

View the latest innovation scorecard data via the Health & Social Care Information Centre website.

For more information contact:

✉ Sam.scott@officeoflifesciences.gsi.gov.uk

🖥️ www.hscic.gov.uk/

Medtech Innovation Briefings (MIBs)

MIBs are published by NICE and are designed to support NHS staff to make decisions about using new medical devices and technologies. Each briefing provides a description of the technology, its use within a treatment pathway and a summary of the evidence on the technology's efficacy and cost effectiveness including its strengths and weaknesses.

To find out more contact:

✉ england.innovation@nhs.net

🖥️ www.innovation.england.nhs.uk/mib



NICE Implementation Collaborative (NIC)

The NICE Implementation Collaborative is a unique partnership between the NHS, life sciences industry, healthcare professional bodies and patient groups aiming to improve access to the latest technologies and treatments that will benefit patients.

The NICE Implementation Collaborative is currently focussing on four priorities:

1. A medical technologies guidance toolkit.
2. A treatment for people with alcohol dependence.
3. Clinical diagnosis and management of tuberculosis and measures for its prevention and control.
4. Non-ST Elevation Acute Coronary Syndromes.

For more information contact:

✉ england.innovation@nhs.net

🗨 www.innovation.england.nhs.uk/nice-implementation-collaborative/

DIGITAL

Digital Primary Care: Driving digital adoption through maturity assurance and operating framework

Digital Primary Care Services enable patients to routinely use a variety of digital communications and technologies in order to access their own health and care records, and other health information sources and services. Patients are given access to their records within their home, on the go, and in health and care settings. They will deliver an efficient and secure registration service to enable citizens to register and change their Primary Care providers online, empowering patient choice and decision-making.

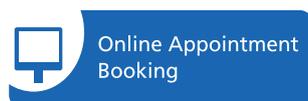
Seven digital capabilities are being tested to create a Digital Primary Care Service to improve healthcare experience and general practice access:



Offering a 'click and collect' or 'click and deliver' service for repeat prescriptions i.e. order repeat prescriptions online, GP signs off in electronic prescription service, Pharmacy dispenses and patient either collects or Pharmacy deliver, all being trackable online by the patient.



Installing WiFi and other enabling infrastructures in practices, specifically allowing patients access to Patient Online services e.g. repeat prescriptions, online appointment bookings and viewed from their own mobile devices.



Patients able to book appointments online. This may also include the capacity to inform patients if an appointment is actually needed. Depending on presenting conditions there may be more appropriate services to meet the patients needs.



Patients able to provide information prior to seeing the GP to aid pre-referral diagnosis and maximise effectiveness of Patient-GP face time.



Patients able to view their full coded medical records, including the option for them to download their records into third party applications, where required.



Transformed access options for patients that enable consultations with a GP via telephone, using email, webcam or instant messaging, where this is deemed to be appropriate and clinically safe.



Telehealth devices are made available to patients to test and undertake diagnostics then upload to GP for consideration. Telecare and health living apps will enable patients to monitor and manage their health or live independently without having to visit their GP surgery as often.

The programme has been supported by the Prime Minister's Challenge Fund which has invested £175 million to improve access to general practice and stimulate innovative ways of providing primary care. Over 18 million patients across 2,500 practices have benefited through developing and implementing existing and emerging technologies.

A summary showcase of technology related highlights is available at:

 www.england.nhs.uk/wp-content/uploads/2015/03/pmcf-innv-shcse-2-tech.pdf

For more information contact:

 england.digitalprimarycare@nhs.net

 www.england.nhs.uk/ourwork/qual-clin-lead/calltoaction/pm-ext-access/

 www.england.nhs.uk/digitaltechnology/info-revolution/digital-primary-care/

MyNHS

MyNHS is a website where health and care staff and the public can compare information about NHS, public health and social care organisations to inform patient choice, accountability and commissioning decisions.

MyNHS includes measures for:

- How effective hip and knee surgery has been according to patients.
- How long patients stay in hospital on average.
- The comparative cost of services in different hospitals.

MyNHS is expanding over the next year to publish information about:

- GP practices.
- Clinical Commissioning Group outcomes.
- How digitally enabled local organisations are.

For more information, email:

 england.digital.services@nhs.net

 www.nhs.uk/mynhs

NHS Choices

With around 50 million visits each month, NHS Choices continues to act as a national, patient-facing digital service, offering users high-quality information and advice about conditions, treatments and local services. In addition to its recent expansion into mental health, a new consultant directory has also been published as part of the site. Over the next year, visitors to the site can expect increased promotion of apps and services addressing conditions highlighted in the NHS Five Year Forward View, including diabetes, obesity, maternity and early years. The site will also make a direct contribution to NHS England's innovation agenda by offering improved access to information about clinical trials of medicines.

To find out more, contact

 england.digital.services@nhs.net

 www.nhs.uk

Nursing Technology Fund

This £65m programme has supported 147 projects to help free up midwives' and nurses' "time to care" by equipping them with technologies that drive up clinical quality, increase patient safety and engage patients and carers in decision-making about their care. An example of one solution being financed at Barts Health NHS Trust is electronic clinical observations for patients, which allow ward-based nurses and midwives to capture vital signs and automatic escalations to medical staff when a patient is unwell. These real-time observations feed into patients' electronic records.

For information on the supported initiatives please contact:

✉ england.nhsnursingtechfund@nhs.net

💻 www.england.nhs.uk/digitaltechnology/info-revolution/nursing-technology-fund/

Promoting Health Apps

Promoting Health Apps is supporting the development of new ways of delivering care through the greater adoption and use of digital technology by professionals and patients.

Encouraging patients to use new technologies to better manage their care and treatment can drive improved outcomes.

In tandem with the NHS Choices website, NHS England is continuing to expand its suite of health apps; including, most recently, the rollout of the country's first ever digital library for mental health services. Plans are in train to capitalise on this success and increase patients' uptake in 2015-16 by accrediting further digital tools for addressing obesity, Type 2 diabetes and smoking cessation. Many Academic Health Science Networks work with app development companies to ensure a pipeline of reliable health apps.

To find out more, contact:

✉ england.digital.services@nhs.net

💻 www.england.nhs.uk/2015/03/24/mh-apps-library/

💻 www.nhs.uk/conditions/online-mental-health-services/Pages/introduction.aspx

Technology Enabled Care Services (TECS)

Digital technology offers new opportunities for transforming the outcomes and experience of patients and citizens and of supporting those who care for them.

The TECS programme provides tools which support NHS commissioners in making decisions about innovative technologies such as telehealth, telemedicine and healthcare apps. TECS provide guidance on commissioning, procurement, implementation and evaluation of products.

For more information contact:

✉ england.digital.services@nhs.net

💬 www.england.nhs.uk/ourwork/qual-clin-lead/tecs/

Widening digital participation

The widening digital participation programme aims to reduce health inequalities among older people, disabled people from diverse communities and those on low incomes by supporting them to build their confidence in using IT to find healthcare information online.

So far over 140,000 people have been trained through the programme and results include:

- 34 per cent of learners had fewer GP visits.
- 63 per cent of learners improved their diet.
- 48 per cent of learners saved time & 24 per cent saved money by going online.

For more information and case studies please contact:

✉ england.digital.services@nhs.net

💬 nhs.tinderfoundation.org/

INFORMATION & DATA

100,000 Genomes Project

The 100,000 Genomes Project is focused on sequencing all the genes of patients with rare/inherited diseases and certain common cancers. The project will enhance our understanding of the genetic basis underlying these conditions, together with how they are expressed within an individual (phenotype). This will provide important insights into the prediction and

prevention of disease to enable a precise diagnosis to be made, in some instances for the first time. It will enable personalisation of medicines and other treatments targeted to the specific genetic variants leading to improved responses and outcomes.

11 NHS Genomics Medicine Centres have been established across England with more to be launched later this year. These centres are enabling participation of patients and family members, with informed consent, in collecting and processing samples to extract the DNA for sequencing, in capturing clinical and other diagnostic information to inform the overall interpretation of the genome sequence and its expression; and, validating the findings from whole genome sequencing for diagnostic and care management purposes.

There has been active patient and public involvement in designing the genomics service. Progress to date includes the creation of genomics multidisciplinary teams, capture of clinical information into new and standardised datasets to enable an individual picture of a participant to be established, and an engaged workforce in informing and consenting participants for genomic studies. There are new laboratory services and streamlined clinical pathways focused on providing DNA of the highest quality, and collaboration across multiple hospital trusts and with academic partners including Academic Health Science Networks.

Successful delivery of the 100,000 Genomes Project will position the NHS as world leaders in realising a new era of personalised medicine for the benefit of patients, and ensuring it is built into mainstream care. It will build upon the excellent work the NHS and its academic partners have already delivered in the field of molecular medicine and genetics.

To find out more contact:

✉ england.genomics@nhs.net

🖥️ www.england.nhs.uk/ourwork/qual-clin-lead/genomics

care.data

Routinely collecting and linking GP and hospital data will increase understanding about the long-term effectiveness of clinical interventions, such as vaccination programmes. It will also enable doctors to offer the best possible treatments to their patients, and empower patients to make more informed decisions about their care based on their personal circumstances.

To find out more, contact:

✉ Care.datapmo@nhs.net

🖥️ www.england.nhs.uk/ourwork/tsd/care-data/

Code4Health

Significant momentum has been achieved in the NHS Open Source initiative which has led to a number of software products for use in the NHS, including systems for Electronic Patient Records, E-prescribing, nursing observation to track deteriorating patients, and ophthalmology.

Following on from, and wrapping around this, the Code4Health programme has been firmly established with the four principal objectives:

1. Code4Health Learning – Engaging clinicians and other health staff in the process of designing, building and using software to ensure their needs are central to everything produced.
2. Code4Health Platform – A free to use environment of open interfaces allowing innovation and testing of interoperability and integration.
3. Code4Health Challenges – Opportunities for entrepreneurs, organisations and communities to work together to solve problems within the NHS, with the offer of support and prizes to take products through to production.
4. Code4Health Communities – Over 25 Geographical and Product focused communities that bring together people to collaborate, share ideas and work on specific problems.

For more information contact

✉ info@code-4-health.org

🖥 <https://code-4-health.org/>

Friends and Family Test

In August 2015, the Friends and Family Test (FFT) achieved the milestone of having collected 10 million examples of feedback from patients. This makes the Test the world's largest single initiative for gathering patient views with a diverse range of backgrounds about healthcare services.

The Test is now delivered through a variety of channels including text messages, emails and touchscreens, and provides a near-real-time, continuous source of feedback on areas which are working well, as well as identifying aspects of services which need improvement. With the Test being adopted and used across more of the NHS than ever before, NHS England is able to ensure that patient views remain integral to how healthcare is delivered.

For more information contact:

✉ england.friendsandfamilytest@nhs.net

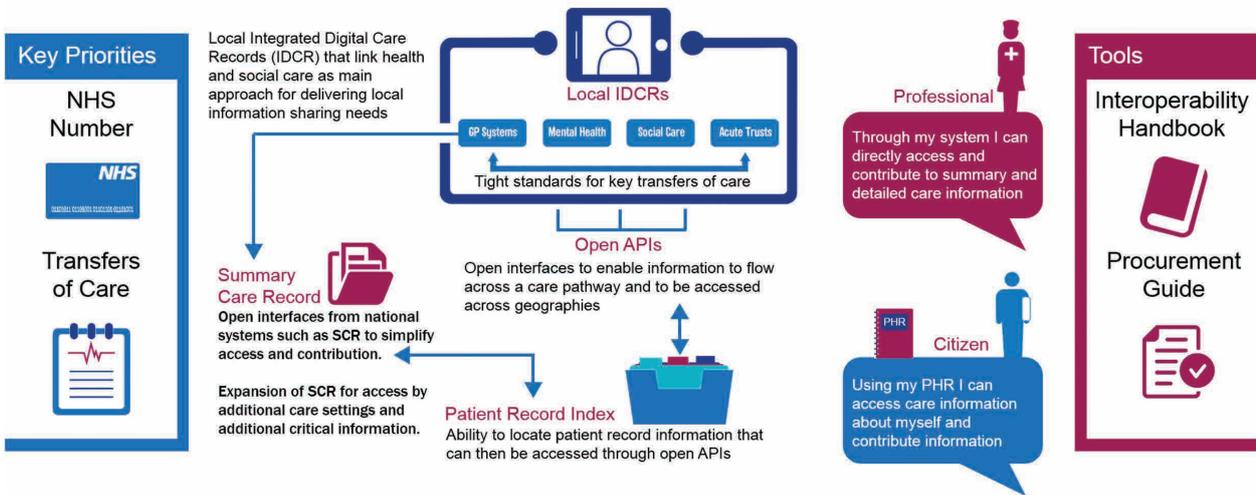
🖥 www.england.nhs.uk/ourwork/pe/fft/

National Information Board: Interoperability Strategy

Interoperability is the ability of different healthcare computer systems to communicate and exchange data, with the aim of maximising the quality of care patients receive. Interoperability is a key component of delivering the person-centred vision of care in England, and compliments other innovation programmes such as the Integrated Care Pioneers and the New Care Models Vanguard sites.

The Interoperability Strategy is based on collaborating both locally and nationally, particularly in supporting organisations to deliver relevant aspects of their digital roadmaps.

Interoperability Strategy the development of an open environment for information sharing supporting emerging models of care based on open interfaces and open standards.



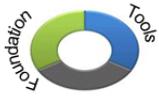
How we are helping local organisations

In conjunction with the Integrated Care Pioneers, Vanguard and local initiatives such as Ripple, we will be developing tools and products to support local organisations in delivering the interoperability aspects of their local digital roadmaps.

Offer 1 Offer 2 Offer 3 Offer 4 Offer 5 Offer 6

Business Justification. This product provides an outline of the priority use cases that drive the need for integrated digital care records. This product to support local organisations in their business justification for investment. This based on the knowledge and lessons learnt from Wave 1 and 2 Pioneer sites, and other leading lights.

Elements	Timeline
Priority care use cases (Wave 1 and 2 Pioneer sites and other leading lights)	August
Iteration incorporating a wider set of intelligence including Vanguards	October



Offer 1 Offer 2 Offer 3 Offer 4 Offer 5 Offer 6

Interoperability Handbook. The handbook will enable more informed decision making on the different interoperability approaches that can be taken, how they fit as part of an interoperability roadmap and the supporting standards, policies and guidance in place.

Elements	Timeline
Interoperability Handbook	August
Iteration of Handbook	November



Offer 1 Offer 2 Offer 3 Offer 4 Offer 5 Offer 6

Information Governance. Practical guidance on real-life clinical scenarios and the information governance approaches taken. Supplemented with agreed national guidance and standard templates

Elements	Timeline
A suite of nationally “kite marked” standard templates	August
Direction for sharing information within prioritised Clinical scenarios	August
Iteration of clinical scenarios	September



Offer 1 Offer 2 Offer 3 Offer 4 Offer 5 Offer 6

Open interfaces. Defined interfaces that describe the data required from clinical systems to support the identified priority care / clinical use cases.

Elements	Timeline
Demo Transfer of Care API into an Open Electronic Health Record in a test environment	August
Interfaces to share data for priority use cases	September
Integration engine working in N3 environment sharing data from Pioneers	December



Offer 1 Offer 2 Offer 3 Offer 4 Offer 5 Offer 6

Clinical and citizen viewer. Open source software implementation for clinicians / care professionals and citizens to access integrated care record information.

Elements	Timeline
Clinical viewer alpha prototype	May
Iteration with transfer of care	July
Iteration with telehealth	September
Iteration with virtual wards and specialist views	November
Viewer functioning in N3 environment	March
Citizen viewer	March



Offer 1 Offer 2 Offer 3 Offer 4 Offer 5 Offer 6

Citizen engagement. Engagement approach and materials to activate citizen interest and define common requirements for citizen's to feed, access and use data about themselves to better manage their health and well-being.

Elements	Timeline
Citizen Requirements (Established through using the toolkit)	September
Toolkit for Citizen engagement	December
Citizen app' release (based on Citizen Requirements)	March



To find out more, contact:

✉ inderjitsingh@nhs.net

🖥️ www.england.nhs.uk/digitaltechnology/info-revolution/interoperability/



Patient Access to Records

Building on the successes of the last 12 months which have seen 97 per cent of GP practices offering patients the chance to book appointments, order repeat prescriptions and view a summary of their GP records online, patients will have full access to their entire digital health record in real time by 2018. This will provide patients with the opportunity to engage directly in their own health care, and better communicate with care providers. As part of the Personal Health and Care 2020 vision, there will be more open interfaces to allow data to be shared with a growing number of applications and services, widening the offer to patients.

For more information please contact:

✉ england.digital.services@nhs.net

🗨 www.england.nhs.uk/ourwork/tsd/

Summary Care Record

Summary Care Records (SCRs) is now widely used across many care settings from hospital pharmacies through to significant numbers of ambulance trusts, A&E depts and 111 providers. Clinicians are able to access the most up to date lifesaving information wherever they are in England. Additional information from the GP record will be available in the summary care record for most patients from September, allowing a richer data set including items such as end of life care preferences to be shared easily. NHS England are also developing a roadmap to offer a wider data set within the summary care record, including more flexible viewing capability, and the use of flags to identify such things as learning disability status such as is free and easy to adopt within organisations, and provides national coverage. We are currently in the process of supporting the rollout of SCR to all community pharmacies in the country.

For more information please contact:

✉ england.digital.services@nhs.net

🗨 www.hscic.gov.uk/scr

INFRASTRUCTURE & DIFFUSION

Academic Health Science Networks

Academic Health Science Networks (AHSNs) have been set up with a clear purpose: accelerate the adoption and diffusion of evidence based innovation in the NHS for the benefit of patients and for the benefit of the wider economy.

By enabling change through collaboration, they bring together local NHS partners, academia and industry by acting as catalysts, brokers, coordinators, sponsors and knowledge-sharers.

Many important networks and relationships have developed, but what is equally important is the deep learning that has occurred through the variety of projects about the systemic barriers and enablers that hold us back in achieving the full potential innovation has to offer.

In addition to directly supporting partners to diffuse specific innovations and best practice, AHSNs work to create an infrastructure and environment that enables the development, identification and adoption of innovation. This work encompasses the establishment of partnerships and networking opportunities, as well as investment in infrastructure.

The AHSN licence from NHS England sets out four broad objectives:

1. Focus on the needs of patients and local populations.
2. Build a culture of partnership and collaboration.
3. Speed up adoption of innovation into practice to improve clinical outcomes and patient experience.
4. Create wealth.

AHSNs have been operational for two years and are working to deliver quick wins and maintain pace, while at the same time creating the headroom to address longstanding issues that inhibit the adoption of innovations.

Specific Programmes of activity for 2015/16	Clinical areas										Additional cross-cutting projects/ System enablers		
	Alcohol	Cancer	Cardiovascular / Stroke	Children and maternity	Dementia	Diabetes	Long term conditions	Mental health	Musculoskeletal	Respiratory		Older people living with fragility	Others
East Midlands		●	●			●		●		●	●	Obesity, Industry and enterprise, Liver disease	Technology enabled care services
Eastern			●		●	●				●	●	Precision medicine catapult	Host for the Small Business Research Initiative (SBRI)
Manchester			●							●			Equity Investment, Devolution
Health Innovation Network (South London)	●	●			●	●			●				Technology, Interoperability, CLAHRC support
Imperial College Health Partners		●	●				●	●		●		Neuro-rehabilitation	Overseas development, Research
Kent Surrey Sussex			●		●		●			●	●	Enhancing quality and recovery	Proactive care, End of life care, Sustainable services for older people
North and East and North Cumbria			●					●		●	●	Fractures	Telehealth, SME engagement
North West Coast	●		●					●	●		●	Sepsis, Precision medicine, SME & business support	Innovation scouts, Procurement, Digital
Oxford	●	●	●	●	●	●	●	●	●	●	●	Early intervention in psychosis, Anxiety and depression, Inflammatory bowel disease	Diagnostics, Clinical innovation adoption
South West	●		●		●	●	●	●			●	Urgent & acute care	Evaluation, Social investment, Primary care sustainability, Outcomes-based commissioning
UCLPartners		●	●	●	●	●	●	●			●	Neurosciences	Technology
Wessex					●			●		●		Nutrition, Orthopaedics	Life science cluster
West Midlands							●	●	●		●	Wellness and disease prevention, Healthy living and active ageing	Education and workforce of the future
West of England			●			●	●	●					
Yorkshire & Humber			●		●	●	●	●		●	●	Urgent and emergency care, Avoidable hospital mortality	E-health, Quality improvement and behaviour change, Open innovation

AHSNs are supporting over 250 active programmes and projects across a range of clinical and cross-cutting themes. These have been selected in response to the priorities of their local populations and health economies. AHSNs also work collectively to support national priorities such as the ambitions set out in the NHS Five Year Forward View. AHSNs are formally delivering partners for a number of national programmes including:

- Medicines optimisation.
- Small Business Research Initiative and supporting small, to medium enterprises (SMEs).
- Patient Safety Collaborative.
- NICE Implementation Collaborative.
- NHS Innovation Accelerator.
- Test Bed Programme.

To find out more:

 www.ahsnnetwork.com/

Innovation Connect

NHS England offers innovators a fast-track sign-posting service, which allows for the submission of ideas with a high potential for meeting defined clinical needs.

Innovation Connect is a support service offered by the NHS England Innovation team. Connect provides systematic support to innovators at all stages of development. Innovations are submitted via the Innovation Exchange portal and are reviewed by the Innovation team to identify any support available within the NHS and with external partner organisations.

NHS England also offer innovators one-to-one meetings in order to accelerate the development of ideas, such as with a recent proposal to test for the markers of prostate cancer. Some innovations will be signposted to Academic Health Science Networks who can support the further development and rollout of evidence-based innovations across their regions.

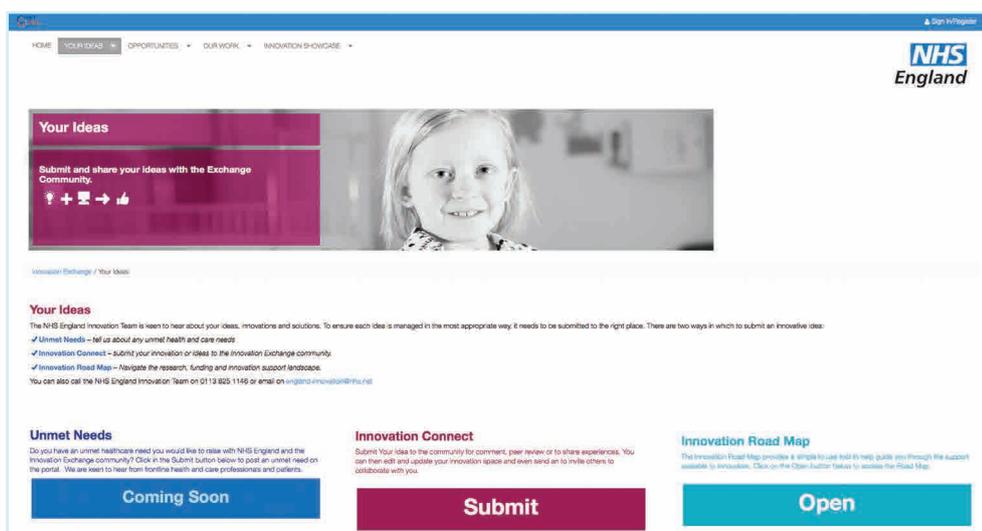
To find out more, contact

✉ england.innovation@nhs.net

🖥️ www.innovation.england.nhs.uk/

Innovation Exchange Portal

Innovation Exchange is NHS England's central portal for sharing new ideas and innovations across the NHS. Exchange contains information on over 300 innovations ranging from new pathways and ways of working through to novel medical and digital technologies. The portal provides a platform for innovators to share their ideas and get support from a growing online community. In addition Exchange provides a road map to help innovators identify the right support both nationally and within their own regions. The portal also provides a news feed of networking and funding opportunities spanning innovation and research.



For more information, contact:

✉ england.innovation@nhs.net

🖥️ www.innovation.england.nhs.uk

NHS Innovation Accelerator (NIA)

The NIA is a fellowship programme being delivered collaboratively with UCL partners, The Health Foundation and with the Academic Health Science Networks, who are co-sponsors of this programme.

The aim is to deliver on the commitment detailed within the NHS Five Year Forward View – creating the conditions and cultural change necessary for proven innovations to be adopted faster and more systematically through the NHS, and to deliver examples into practice for demonstrable patient and population benefit.

17 fellows have been selected in the first cohort and are supporting innovations across mental health, secondary care, public health, primary care and paediatrics. Their innovations range from medical devices to clinical informatics systems, health apps and diagnostic pathways. Many have been supported by their Academic Health Science Networks to bring their product into the healthcare market.

For more information contact:

✉ england.innovation@nhs.net

🗨 www.innovation.england.nhs.uk/

Test Beds

The NHS Five Year Forward View set out the intention to develop a small number of 'Test Beds' to serve as real world sites for evaluating combinations of innovations that offer the prospect of better care and better patient experience of care, at the same or lower overall cost.

Following an international call to innovators and interested NHS sites, NHS England, the Academic Health Science Networks, the Department of Health and the Department for Media, Culture and Sport are supporting the development of partnerships that will undertake rapid and robust evaluations of new combinations of innovations at scale.

Healthcare challenges being considered by developing partnerships include those looking to connect patient information, improve integrated working, support self-care and management of stroke and long term conditions.

Test Bed sites will be announced in December 2015.

For more information contact:

✉ england.innovation@nhs.net

🗨 www.england.nhs.uk/ourwork/innovation/test-beds/

SERVICE RE-DESIGN

Healthy New Towns

With support from Public Health England, NHS England is working with local authorities, housing associations and the development sector to identify housing schemes which can benefit from NHS support, in the creation of new communities which will promote health and wellbeing.

In addition to conventional approaches, approximately five long-term partnership schemes will explore new and creative ways of addressing the health, care and financial “gaps” articulated by the NHS Five Year Forward View. A combination of improved urban design, better housing and better use of technologies will assist with the prevention of health problems, encourage healthier lifestyles, and will enable older people in particular to live independently in their own homes for longer. Larger new developments will also be supported to explore more radical approaches to providing healthcare, integrated with other public services, taking advantage of the freedoms offered by sites with fewer legacy constraints. It is also envisaged that the NHS as a whole will benefit financially from associated savings.

Interested organisations have until 30 September 2015 to submit expressions of interest to england@fiveyearview.nhs.net

For more information, contact

✉ england.fiveyearview@nhs.net

🐦 [#healthynewtowns](https://twitter.com/healthynewtowns)

Integrated Care Pioneers

25 sites have been supporting the rapid promotion and uptake of lessons learnt from across England in how best to support the delivery of integrated care. NHS England is encouraging the growth of locally-led solutions. The support package available to Pioneers aims to provide sites with practical help in creating holistic, co-ordinated and person-centred approaches to care.

To find out more, contact:

✉ England.integrationpioneers@nhs.net

💻 www.england.nhs.uk/ourwork/part-rel/transformation-fund/

New Care Models and Vanguard sites

The flagship New Care Models programme and vanguard sites will deliver against all three areas outlined in the NHS Five Year Forward View:

- The care and quality gap.
- The health gap.
- The funding and efficiency gap.

Examples include multispeciality community providers moving specialist care out of hospitals into the community, integrated primary and acute care systems joining up GP, hospital, community and mental health services, enhanced health in care homes offering older people better, joined up health, care and rehabilitation services, and revised approaches to urgent and emergency care. The models will close the gaps by focussing on out-of-hospital care and population health: helping keep people well, and bringing together home care, mental health and community nursing, GP services and hospitals. The vanguards are about designing and demonstrating the way that the NHS and care services will meet patients' needs in the future.

They will also join up the often confusing array of A&E, GP out of hours, minor injuries clinics, ambulance services and 111 so that patients know where they can get urgent help easily and effectively, seven days a week.

To find out more, contact:

 england.newcaremodels@nhs.net

 www.england.nhs.uk/vanguards

NHS Diabetes Prevention Programme

The NHS Diabetes Prevention Programme aims to reduce the number of people who develop type 2 diabetes, by encouraging people who are at risk to adopt evidence based behavioural changes. Diabetes treatment currently accounts for 10 per cent of the total NHS budget of around £10bn per year.

NHS England, Public Health England and Diabetes UK are working together to ensure that in the first year 10,000 people are enrolled in the programme. It will subsequently be rolled out nationally from March 2016.

Clinical Commissioning Groups have been asked to register their interest in becoming first wave sites for the NHS Diabetes Prevention Programme in 2016. The programme will focus on improving diet, weight and exercise to reduce the incidence of type 2 diabetes. Service providers are also invited to contribute to the programme. The deadline for responses is 18 September 2015.

To find out more contact:

✉ diabetesprevention@phe.gov.uk

🖥 www.england.nhs.uk/ndpp

Small Business Research Initiative for Healthcare (SBRI)

SBRI is led by the Academic Health Science Networks and is a well-established process which challenges industry to provide solutions for unmet clinical needs.

It provides £20m funding each year for companies to develop, evaluate and bring products to market. Successful companies are able to receive second-wave funding to ensure they have a level of sustainability to supply their products into the healthcare market.

Successes include Noctura 400, a non-invasive device to treat sight-threatening conditions like diabetic retinopathy. Trials have demonstrated that it can reverse eye disease in as little as six months.

For more information visit:

☎ [+44 \(0\)1223 597813](tel:+44201223597813)

🖥 www.sbrihealthcare.co.uk/

CASE STUDIES

For links to range of case studies illustrating innovation, please visit:

🖥 www.innovation.england.nhs.uk/

WE ARE LOOKING FOR BOTH NEW IDEAS AND EXISTING INNOVATIONS ENTERING THE NHS

Your AHSNs can provide regional assistance for your innovation or you can use the Innovation Connect service.

Do you have an innovation that:

- Meets a clearly defined need?
- Has strong clinical support?
- Could transform patient care?

AHSNs can support your access to:

- Research support.
- Funding opportunities.
- Rollout/trials in the healthcare sector.
- International opportunities.

You can submit your idea directly to the Innovation Connect team or AHSN:

 **0113 825 1146**

 **england.innovation@nhs.net**

 **www.innovation.england.nhs.uk/**

 **www.ahsnnetwork.com/**

The Innovation Connect service is provided by NHS England.

LINKS TO REFERENCED DOCUMENTS

NHS Five Year Forward View	NHS England » Search Results » NHS Five Year Forward View
NHS Five Year Forward View – time to deliver	NHS England » NHS Five Year Forward View: Time to Deliver
National Information Board – Personalised Health and Care 2020	www.england.nhs.uk/2014/11/13leaders-transform/



Get in touch:

✉ england.contactus@nhs.net

☎ 0300 311 22 33

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💻 www.nhs.uk