

HFMA Annual Conference

Delivering Value Through Digital



Session 1 – Reimagining Care

Q: How can digital technologies such as digital medicine, genomics, artificial intelligence and robotics transform the delivery of healthcare?

What will future patient pathways look like?

Patrick Mitchell
Director of Innovation, Digital and Transformation
Health Education England
8 December 2021





The Wade-Gary Review

“The NHS must be bolder in stating that the health and care system should empower citizens to manage their health and well-being and give them the tools to take ownership”

“Now is the moment to put data, digital and technology at the heart of how we transform health services for the benefit of citizens, patients and NHS staff”

“At the core, this involves the creation of a scalable capability that integrates clinical, operational and technological resources to transform patient pathways and service delivery”

What are we trying to achieve?

Reflections on the Topol Review

This proposed **three** principles to support the deployment of digital healthcare technologies throughout the NHS:

1 // Supporting our senior leaders

1. Patients included as partners and informed about health technologies

2. Evidence: the healthcare workforce needs expertise and guidance to evaluate new technologies, on the basis of real-world evidence of clinical efficacy and cost-effectiveness

3. The gift of time: wherever possible the adoption of new technologies should enable staff to gain more time to care

5 // Digital literacy of the wider workforce

4 // Establishing the 'NHS Digital Academy'

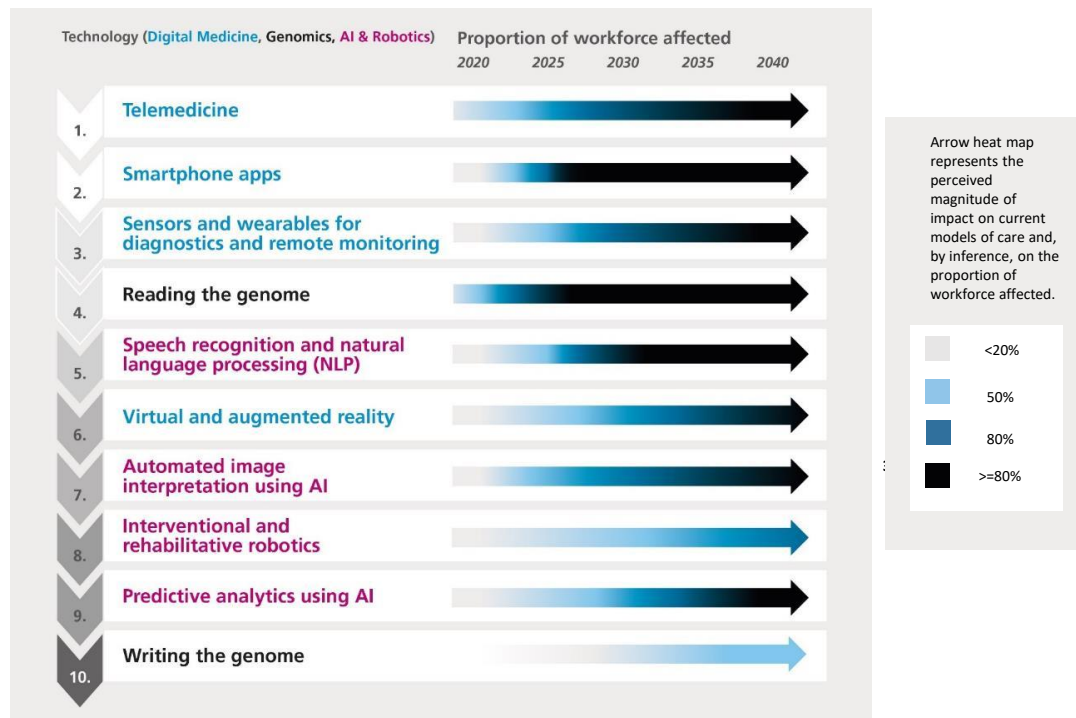
4 themes identified: Genomics, Artificial Intelligence & Robotics, Digital Medicine and Organisational Development

2 // Supporting digital expertise

3 // Building the future digital workforce

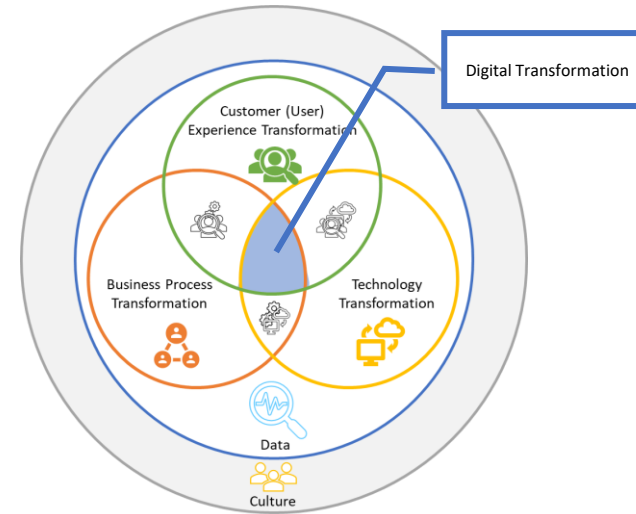


Top 10 Technologies



What is digital transformation?

- Digital transformation is the change in operating model that results from transforming the key areas of the organisation by leveraging technology;
- Digital transformation is not about technology;
- Successful digital transformation is driven by culture
- And leadership with a clear vision and strategy



CLEAR Healthcare Transformation

Inputs

Qualitative clinical engagement data

Quantitative workforce and patient activity data

Frontline clinicians empowered to collect data

Enablers

Data quality control and IG via 33n

Bespoke tools and data visualisations allow clinicians trained in the CLEAR approach to analyse, interpret and draw unique insights

Outputs

Models that address evidence-backed problems

Models that are clinically-led and have clinical buy in

Operationally and financially viable

Frontline clinicians empowered to innovate new models of care



The programme will have completed **36 CLEAR projects by June 2022** across 5 clinical themes and has a growing offering. In 2021, the programme will train a minimum of 68 people consisting of: 46 CLEAR Associates (junior clinicians) 22 CLEAR Sponsors (senior clinicians)

Elective Care Recovery Programme - Digital

3 main priority pathways identified – Eye Care, Cardiology and MSK

The Eye Care electronic referral management and image sharing systems (EeRS) programme will deliver an electronic referral, advice and guidance, and image sharing system(s) to facilitate connectivity between primary care Optometrists and secondary care Ophthalmology acute care providers.

As a result HEE is:

1. Providing case studies, masterclasses, evidence briefings through a dedicated *HEE Learning Hub site* for all Elective Care Recovery activity and Training Recovery
2. Signposting to relevant Elearning for Health courses for each of the 3 priority pathways
3. Exploring use of technology and digitally enhanced learning to overcome some of the education challenges – e.g. Elearning for Technicians in Eye Care

6 // Embedding
social care

2 // Supporting our
digital experts

5 // Digital
enabled in the
wider
workforce

3 // Building our
digital
workforce

4 // Establishing
the 'NHS Digital
Academy'

“It really will be transformative that eventually... the patient will be truly at the centre.”

Eric Topol, MD



Digital Home Care

- making a difference in the pandemic & beyond

Tara Donnelly | Chief Digital Officer | NHSX
Reimagining care | HMFA | 8 December 2021



Overview



- In the first wave we worked with NHS colleagues to try a model of **supporting people at home with covid** - pulse oximetry and an app to share results with clinical team - and there are now **over 90 NHS centres**
- In September we began work with all seven NHS regions in England to start to **scale digital home care** - in care homes, for people with long term conditions, both physical and mental health, and for acute covid
- We provided **funds for implementation support** to help this work and importantly, a **support offer** to accelerate spread - the **Innovation Collaborative for Digital Health**: small team, microsite with shareable resources, events in support, films, podcasts *"Share more & get smarter faster"*
- We are also working on **high volume priority patient pathways**, establishing tech in support of care that is more home and guidance based in **dermatology, ophthalmology** & to help **elective recovery** - and for **hypertension**
- This is all delivered in collaboration with colleagues across NHSE and more widely and in this first section I will **share some patient and staff stories** & in the second talk about value



Digitise



Connect



Transform

Tech enabled virtual ward: Video

“The hospital is brilliant. But it's not like being at home is it?”



A hospital looking at different ways to ease pressure on beds expands its virtual ward.

<https://youtu.be/8RVxZKw0RKM>

Runtime: 2 mins 28 secs

An example...



Recording vital signs at home

The patient records their own vital signs eg blood pressure, temperature, oxygen levels and enters readings onto an app, website OR they wear a device that does this automatically.

Care team closely monitoring remotely

Clinical teams are able to see patient inputted data and take action where required. Able to support a greater number of patients.



Patient self-managing care

Patient able to better self-manage own care, using technology, whilst supported by their care team in their own home.

What is 'Tech-enabled remote monitoring'?

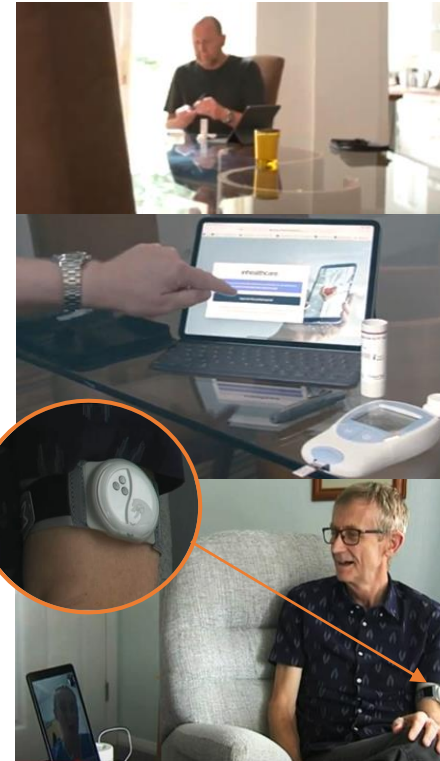


The use of technology, devices or apps to support patients, or their carers or advocates, to monitor and manage their health or long-term conditions.

Information is shared using technology between a patient or citizen and their health or care team to assist in monitoring that person's health.

Further resources:

- [Supporting care with remote monitoring](#)
- [Supporting transformation through the Innovation Collaborative](#)
- [The role of remote monitoring in the future of the NHS](#)



Innovation Collaborative. In partnership with The AHSN Network



Regional scale programme 21/22

Tech enabled virtual wards



Virtual ward - Live (35 - covering 27 ICS, 64%)



Virtual ward - Opening (15 - covering 9 additional ICS)

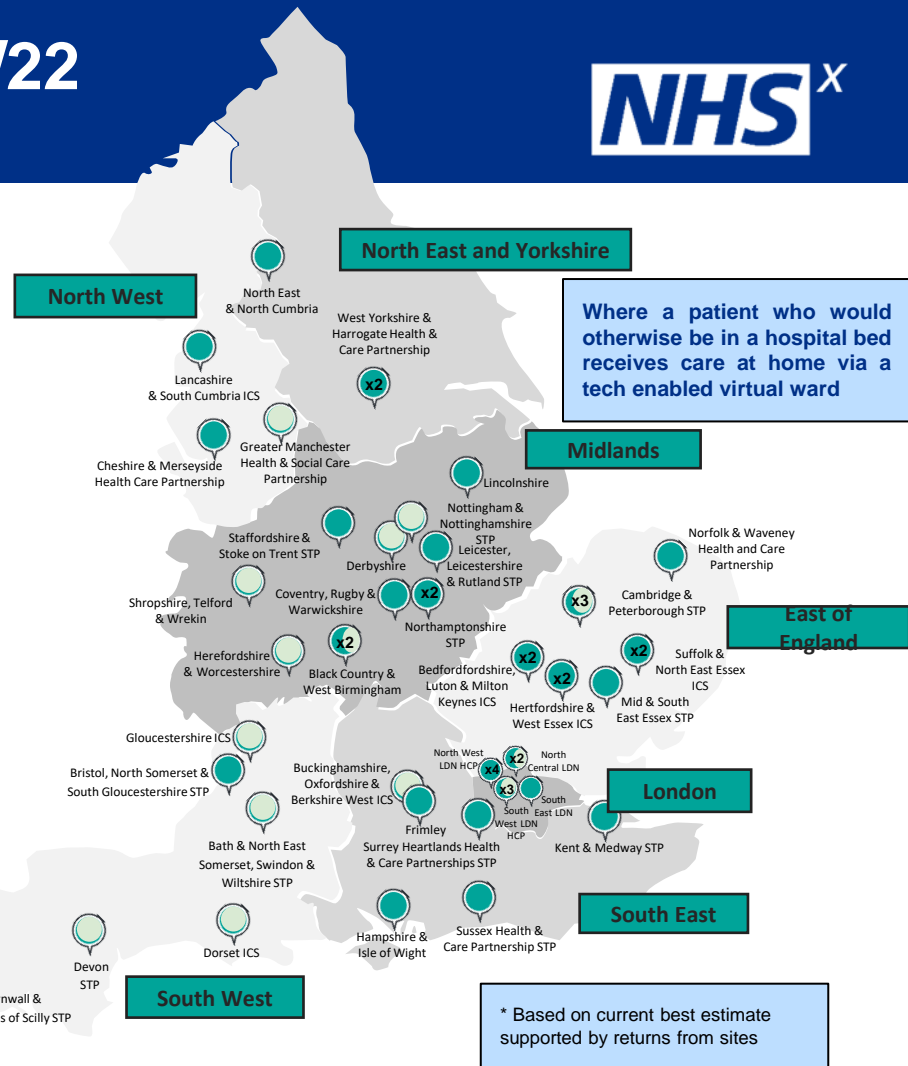
This totals **50 wards** across 36 ICSs by end Dec **86%**

Snapshot: 2,440 patients being cared for on virtual wards a week
= 127,000 per annum; 507,500 bed days @ 4d ALoS
- equal to **c1,400 beds a day** or **58 wards** of 24 beds each

Of the 50 wards, 31 are step-down for early discharge from hospital
and 19 are step-up, supporting admission avoidance

Leigh Jones, who was cared for at Norfolk & Norwich's tech enabled virtual ward post sepsis says he is "indebted" to this "ground breaking" ward:

"It is not something anyone wants, to be in a hospital bed. It is being at home with your pets and your loved ones. I could have all my grandchildren around me, it is priceless. Technology at its best!"



Join the social movement on digital home care!

- For inspiration - read the **Digital Playbooks**
<https://www.nhsx.nhs.uk/key-tools-and-info/digital-playbooks/>
- **Podcast series** - highlighting how innovative technologies are being used to provide safe, personalised and more convenient care:
<https://www.nhsx.nhs.uk/covid-19-response/technology-nhs/the-nhsx-national-innovation-collaborative-podcast/>
- **Join the community** -
For links to case studies, videos, podcasts, animations, event details -
Join the **Innovation Collaborative - Digital Health** workspace on FutureNHS by
emailing InnovationCollaborative-manager@future.nhs.uk
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