

Spotlight on...

DIGITAL TRANSFORMATION

NHS Providers is the membership organisation for the NHS hospital, mental health, community and ambulance services that treat patients and service users in the NHS. We help those NHS trusts and foundation trusts to deliver high-quality, patient-focused care by enabling them to learn from each other, acting as their public voice and helping shape the system in which they operate.

NHS Providers has all trusts in voluntary membership, collectively accounting for £84bn of annual expenditure and employing more than one million staff.

This is the sixth in a series of *Spotlight on...* briefings, aimed specifically at sharing key information on the impact of the coronavirus pandemic on NHS trusts.

As part of wider efforts responding to the coronavirus pandemic, NHS trusts have accelerated the adoption of digital across health and care services. The scale and speed of implementing these digital innovations has been impressive, with staff going above and beyond, using sophisticated approaches and adapting to new ways of working.

The impact of these changes is clear: new, digital ways of working have allowed staff to continue the delivery of safe, effective and timely care during the crisis. This briefing showcases some of these innovations in the acute, specialist, mental health, ambulance and community sectors. These considerable achievements have shown how adaptable and innovative the NHS can be in the face of unprecedented pressures.

There is now an opportunity to build on the progress made by trusts and truly transform services to meet the needs and expectations of patients, service users and carers.

Key messages

- The NHS has historically faced significant challenges when attempting digital transformation. There are a range of reasons for this, but fundamentally the digital transformation of health and care is incredibly complicated. The roll out and implementation of digital solutions during the COVID-19 pandemic – a crisis the like of which the NHS has never faced before – is therefore particularly impressive; progress was made in a matter of days and weeks rather than months or years. A successful national coordination and procurement process saw many trusts implement software such as Attend Anywhere and Microsoft Teams, which transformed care delivery, while individual trusts developed and launched their own digital solutions to aide them in their response to the virus.
- The COVID-19 pandemic has provided trusts with a single sense of purpose and a sense of urgency. Clinical and operational staff working on the front line, but also those supporting them (including digital and IT departments) have worked intensively to develop, implement, test, adapt and roll out new digital solutions. Not all digital innovations have been successful, but trust leaders speak of their teams “failing fast and failing forwards”. There is a new innovative spirit and confidence across the sector which trusts are keen to maintain into the future.
- Trusts have been able to deliver this digital progress because of the support and changes made by the government and its arm’s-length bodies, in particular NHSX and NHS Digital. This has involved supporting the roll out of nationally procured software, making additional funding available, and advising trusts on complicated regulatory and policy areas such as information governance.
- Much of this success has only been achieved because financial restrictions were loosened. Benefits realisation of digital transformation are notoriously difficult to quantify, the disbenefits of failing to invest are often easier to demonstrate, which can make internal business cases difficult to stack up. The government made clear at the start of the pandemic that the NHS would receive whatever it needed financially. This approach, along with greater acceptance of financial risks, meant trusts could mobilise fast by investing in new tools and innovations.
- It is now time to maintain momentum, build on these early successes and continue to transform services for patients and service users. Much of the initial success was built on the hard work and goodwill of NHS staff who went above and beyond. This is not sustainable in the long term, as it has left teams burnt out and exhausted. Instead, new conditions for success must be created:
 - Funding must be made available for the sector to match its ambitious plans for digital transformation. Currently trusts spend between 2-3% of their **total income** on digital transformation. Lord Darzi has suggested this needs to be closer to 4-5%. Rather than divert funding from existing services, there is an opportunity with the comprehensive spending review to properly fund this important aspect of healthcare delivery.

- Nationally, the central leadership of NHS digital strategy, policy, operations and data collection should be clarified. Currently there remains ambiguity around decision making at national, regional, system and organisational level, as well as the different roles and responsibilities of NHSX, NHS Digital, NHS England and NHS Improvement, and the Department of Health and Social Care.
- A balance must be struck between driving bottom up efforts to digitise services where we know much of the true innovation takes place, and top down efforts to coordinate services, procurement and implementation, which is how economies of scale, interoperability and integration can be achieved (for example with the recent Microsoft 365 deal negotiated on behalf of the sector). To do this, trusts must be guided by a clear vision of “what good looks like” in terms of digital transformation. Alongside this, there should be a clear road map for delivery that leads trusts through the different stages of their digital maturity.
- The size of the prize is enormous. The sophisticated digital transformation of health and care services has the potential to drive improvements in care quality and outcomes, while at the same time enhancing efficiency in terms of resource and activity management. Truly integrated health and care records will lead to the better coordination and management of care delivery. Exemplary patient and public facing services will improve user satisfaction and meet people’s raised expectations of twenty first century public services. In addition, population health analytics and artificial intelligence will begin to change the way we think about healthcare delivery.
- The users of these new digital solutions – that is NHS patients, service users, carers but also NHS staff – must be listened to during this next wave of digital transformation. This engagement is essential given the continued challenge of digital exclusion. There needs to be a flexible approach so new digital ways of working can reflect local need and preferences. For example, we know given the choice, many clinicians would prefer to have sensitive conversations face to face rather than via a screen. For all the advances in digital technologies, health and care will always remain people-centred.

Overview of achievements

The **benefits of digital transformation are well documented**: from improved clinical outcomes to financial efficiency savings. The adoption of digital ways of working during COVID-19 can largely be categorised into three areas:

Ensuring care is safe for patients, service users and staff

The risk of asymptomatic staff treating patients who may be particularly vulnerable to the virus has meant many of the conventional ways of delivering health and care services are not appropriate. As in many other sectors, the NHS has had to look at ways it can deliver services remotely to ensure the safety of all those involved and reduce exposure to and transmission of the virus. Many trusts are now offering virtual consultations for this reason, while others have introduced virtual ward rounds and virtual visits. In the mental health sector, trusts have also focused their efforts on maintaining mental wellbeing by making sure people stay connected, particularly those vulnerable in hard to reach groups.

Across the acute, mental health, community and ambulance sectors, digital technologies are also being used to ensure all staff have access to the advice and guidance of specialist clinicians in order to maximise safe and effective care, even when a patient or service user isn't able to see a particular clinician face to face.

Equipping the NHS workforce with digital technology and keeping staff connected

Some of the digital solutions introduced during COVID are not necessarily new concepts, however the real achievement has been in equipping such a large workforce to carry out and implement these new ways of working. For example, electronic patient records have been around in the NHS for some time, but their scaling up and integration during the pandemic has meant clinicians can more easily access data and respond quicker to patient/service user needs. The roll out of Microsoft Teams and video conferencing has ensured clinicians can stay connected and share information more easily, both within organisations and across health and care systems.

Efficient use of resources to relieve exceptional pressures on NHS capacity

Digital technologies have supported trusts in their efforts to create additional capacity in the face of increased demand for services during the pandemic. An increasingly data-driven and mobile workforce has enabled trusts to concentrate limited resources where they're needed most. For example, using video consultations to avoid unnecessary ambulance call outs or using new analytic tools to better manage and report on COVID-19 screenings, test results and resources.

Case studies

The following case studies demonstrate the acceleration of digital during COVID-19 across the NHS provider sector. For more information on each example, please visit nhsproviders.org/spotlight-on-digital-transformation-in-response-to-covid-19

University Hospitals Southampton NHS Foundation Trust

Automating common tasks across an acute trust

The trust successfully **embedded a software application** within the Microsoft Teams platform to share clinical information more easily and automate a number of common, clinical tasks. During the pandemic the tool was expanded so staff were able receive patient referrals on Microsoft Teams, subscribe to receive COVID-19 results for patients on their wards, and more easily contact members of other clinical teams, all eliminating the use of bleeps. This approach has allowed thousands of staff to effectively work both from home and on site by ensuring everyone can rapidly receive the clinical information they need.

South London and Maudsley NHS Foundation Trust

Supporting the mental wellbeing of communities through technology

Along with local authorities across south London, the trust **hosted the first virtual COVID-19 Preventing a Mental Health Crisis Summit**, attended by 1,000 people. This event brought people together virtually, both within and outside the organisation, to look at what needed to be done to support local communities. As a result of the summit, the South London COVID-19 Preventing Mental-ill Health Taskforce has been established and is dedicated to the creation of a shared action plan for prevention due to psychological fallout from COVID-19. Through the taskforce, which has representation from statutory, community and experts by experience, SLaM is working together to identify need and address mental health vulnerabilities within their communities.

Cambridge University Hospitals NHS Foundation Trust

Scaling the trust's electronic patient record during COVID-19

Cambridge University Hospitals has successfully **scaled up its existing electronic patient record (EPR) system** to support its response to COVID-19. The EPR now allows clinicians to track and monitor patients with suspected or confirmed COVID-19. The EPR's analytical function can be used to build reports from this new data to help coordinate COVID-19 screenings, tests and trust resources. The data from the EPR is also underpinning a new COVID-19 scoring system that allows each new referral, case request and outpatient procedure to contain the patient's priority, and risk and vulnerability score. These changes mean clinicians at Cambridge University Hospitals are able to access the trust's EPR remotely, and provide detailed support to colleagues, whether on-site or off-site, 24-hours a day. Care and treatment for patients with chronic conditions can be maintained off site, safely and effectively.

Hertfordshire Community NHS Trust

Using video consultations for virtual ward rounds

The trust has successfully rolled out *Attend Anywhere at scale to care homes* across Hertfordshire, with clinicians working remotely from a central “hub”. Through clinical engagement, agile working and with the support of senior executives, the team at Hertfordshire Community implemented a system that meant clinicians could log in for entire ward rounds, rather than log in separately to each patient. A new electronic template was also devised to ensure data was captured in a robust way and a new contact measure of video patient consultation was established. These initiatives have meant deteriorating patients can be rapidly assessed to prevent unnecessary admissions to hospital.

North East Ambulance Service NHS Foundation Trust

Connecting patients to paramedics across the north east and avoiding unnecessary ambulance call outs

Staff at North East Ambulance Service (NEAS) are *deploying Attend Anywhere in three key ways*. Firstly, newly qualified paramedics are using the software to speak with specialist paramedics for clinician advice and reassurance while on scene with a patient who they think can be safely left at home without needing to travel to hospital. Using a video link allows staff to use visual clues in their clinical decision making. The tool is also being used with patients who, after going through the triage system (either NHS111 or 999), need to speak to a clinician. A secure link is sent via SMS or email to take the patient through to a video call link on their smart phone, computer or tablet. Finally, Attend Anywhere is also being used by other specialists, such as the NEAS Hazardous Area Response Team and Great North Air Ambulance, to see whether their services are required on scene, thus reserving their specialist skills for patients who need them most.

Alder Hey Children’s NHS Foundation Trust

Supporting accurate, remote clinical decision-making for specialist care and enabling virtual visits for children and young people

During the pandemic Alder Hey *purchased 1,250 new devices for staff to use at home*. The rapid deployment of this technology meant the team could deploy both telemedicine and virtual visiting across the trust.

Telemedicine: the Neonatal Partnership, which brings together Liverpool Women’s Hospital and Alder Hey in clinically supporting neonates, was one of the high priority areas. Together with the trust’s innovation team, the digital team worked with InTouch health to implement a solution that enabled patients to be clearly viewed and assessed by clinicians without needing to be physically present.

Virtual visiting: To keep patients and staff as safe as possible, the hospital was forced to restrict on-site visiting of children and young people. Understandably, this was distressing for families and the digital team were asked whether there was anything it could do to help. The team built tablets installed with Skype, Whatsapp and Spotify and assigned free generic accounts for patients to use. This meant patients could still communicate and share music with their families, which significantly improved patient experience.

Central and North West London NHS Foundation Trust

Introducing video conferencing for mental health, community and sexual health patients/service users and staff

The trust worked with the software firm The Phoenix Partnership (TPP) to **develop and deploy a patient portal for video consultations and patient engagement**. A programme of training and development, built resources, and support and guidance material was shared with patients and staff on how to set up, use and engage with video conferencing (with consideration for those patients who are digitally excluded). As a result, 3,000 staff are now set up for remote working, and there has been a significant uptake of video conferencing in nursing and talking therapies. Group therapies have managed well online, and some services such as addictions have reported better attendance in group sessions, increased engagement and more positive outcomes from video consultations. Many patients say it has made access to clinical care easier, with staff valuing the improved home-work life balance.

Cambridgeshire Community Services NHS Trust

Fast-tracking digital solutions across community services

A **trust-wide COVID-19 digital mobilisation plan was developed via a virtual project team**. The immediate priorities were to deliver training via Microsoft Teams and pilot AccuRx and Attend Anywhere virtual consultation software, while deploying vast numbers of laptops and VPN solutions, prioritising clinical and non-clinical staff working in essential services. Weekly video consultation implementation calls with service champions enabled the sharing of implementation experience, development of guides and troubleshooting, which in turn ensured a standardised approach to governance across multiple services. Regular 'all staff' virtual Q&A sessions provided a safe environment within which staff could engage with executive directors and the trust's ICT team to share concerns, ideas, challenges and successes. Video and telephone consultations now account for 50% of all patient contacts, with extremely positive feedback from staff, service users and partners.

What next for the digital agenda?

Trusts are committed to delivering high quality care for patients and service users and will continually look for improvements. At the moment, some trusts are reporting that 90% of their outpatient appointments are delivered virtually or on the phone. But trusts recognise there may be a need to deliver more face to face services, perhaps not in the same numbers as pre-COVID-19, when it is safe to do so. Similarly, while virtual ward rounds remain the safest and most appropriate solution right now, this approach may not be as popular when the risks of the virus begin to recede. Trusts remain cognisant of the needs and requirements of their patients and service users, and the **ongoing evaluation** of the effectiveness of these new ways of working. It remains important also to listen to hardworking NHS staff whose capacity remains stretched.

During the pandemic, trusts have demonstrated their ability to deliver digital solutions at pace and scale. In light of this progress, some trusts have reappraised their digital strategies: the sector is becoming more ambitious about how it can accelerate digital ways of working. To do this, a balance must be struck between allowing trusts to develop solutions that are right for their own local context and, where appropriate, national coordination that can guide trusts into developing and procuring digital tools that will support greater efficiencies and system interoperability. Central bodies, such as NHSX, have a key role to play here.

COVID-19 has been a catalyst for considerable progress on the digital agenda. But now in order to match the ambitious programme of digital transformation trusts aspire to, substantial investment is needed. The comprehensive spending review is a significant opportunity to properly fund the digital transformation of health and care services. Funding should be made available for trusts to invest in core infrastructure to ensure all achieve a basic level of digitisation. This funding should be transparent and consistent, as part of a multi-year funding settlement, so that trusts can make better strategic investment decisions over a longer period of time.

Your feedback
is very welcome.

For any comments
or questions
please contact

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For more information:

[nhsproviders.org/spotlight-on-digital-transformation-in-response-to-covid-19](https://www.nhsproviders.org/spotlight-on-digital-transformation-in-response-to-covid-19)