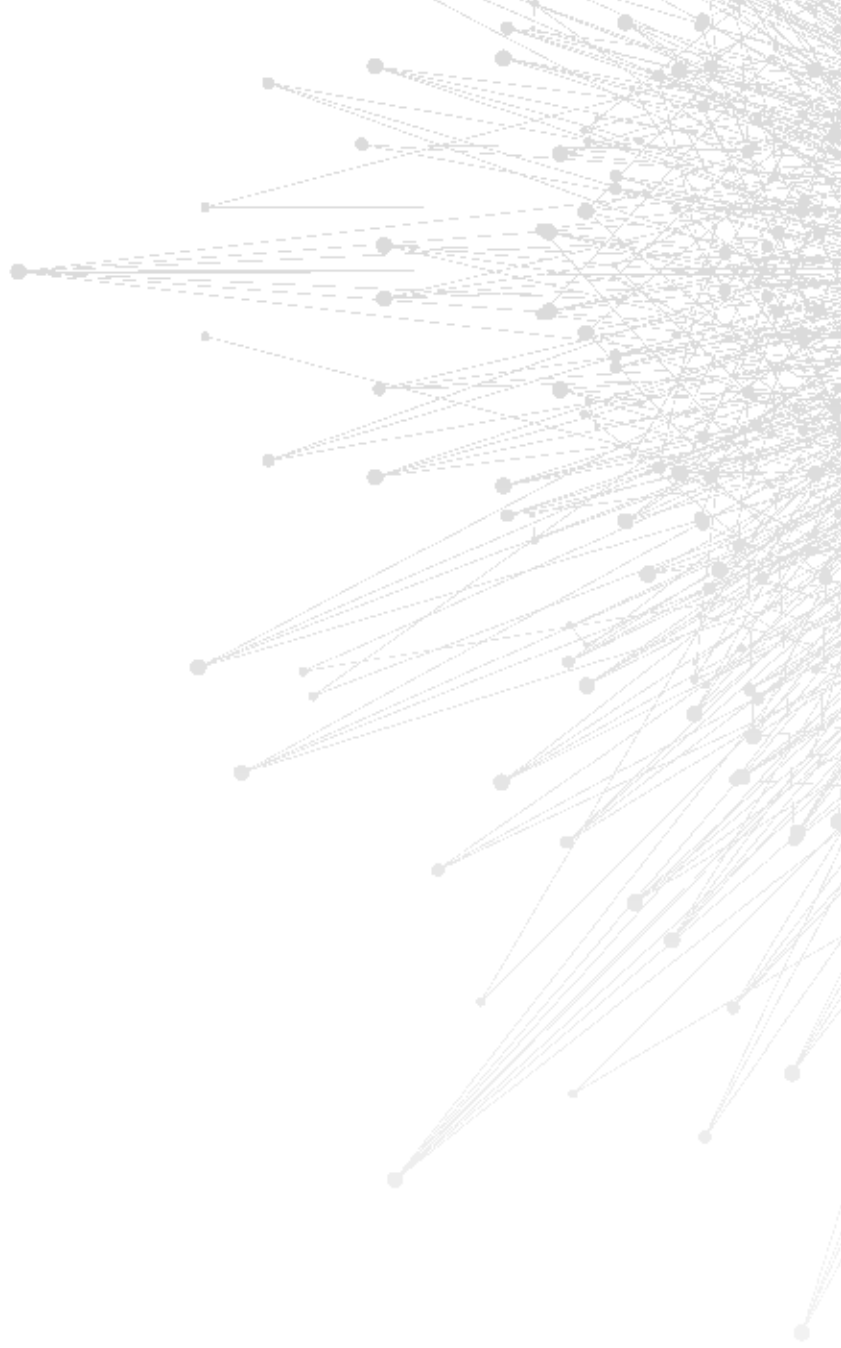


# DIGITAL HEALTHCARE TECHNOLOGY

Enabling clinicians, empowering patients





## **Health**adviser

DAC Beachcroft's Health Adviser publications seek to provide insight, foresight and thought-provoking features and articles that provide practical solutions for the issues of the day, for health and social care professionals.

# FOREWORD

Technology is revolutionising NHS care. At the forefront of this revolution are apps and data platforms that promote seamless data sharing, and digital first care powered by artificial intelligence (AI). Alongside this, the use of wearables is engaging patients in the management of their care and provides opportunity for better data analysis. A fresh 'digital charge' is being led by an enthused Health and Social Care Secretary, who has banned the purchase of fax machines, committed to 'purging the pager' and told staff to communicate digitally to promote information sharing: the digital revolution is gaining pace.

I recently attended the Cambridge Health Network Digital Health Summit and witnessed the incredible strides being taken in medtech - from deep learning software interpreting mammogram images with greater accuracy; the application and benefits of digimed, through to the importance of federated learning models to help test AI in a manner that does not create data sharing bottlenecks. The pace of development of medtech is incredibly exciting and has great potential to improve patient care.

The NHS Long Term Plan<sup>1</sup> (January 2019) set out a ten-year roadmap that

describes how technology will enable clinicians to access and interact with patient records and care plans, wherever they are. More recently, the Topol Review (February 2019) anticipates how technological innovation will impact the roles and functions of healthcare staff, and how to prepare the workforce for this.

The NHS is already a complex technology ecosystem, with a range of different IT suppliers and systems adopted across the country. This in turn means different services are likely to adopt new technology in different ways. Progress is likely to be incremental.

In this report, experts in information sharing, primary care and mental health have shared their insight into how the use of technology is developing in the NHS, the practical benefits, and some of the challenges to overcome.

Technology is often heralded as a way to make the NHS more efficient, provide a more seamless service to patients, and to save money. However, critical to any successful implementation will be the cultural transformation required to embed digital healthcare technologies. This requires investment, education and

training for staff to change entrenched working practices and attitudes.

Patient safety is paramount, and clear legal frameworks for the assessment of such new technology must provide both confidence to patients and assurance to purchasing NHS organisations.

We'd like to take this opportunity to thank our six expert participants: Paul Bate (Managing Director, NHS Services at Babylon Health), Christopher Hilton (Director of Strategy and Clinical Director for Integrated Care at West London NHS Trust), Hugh Lloyd-Jukes (Chief Executive at Oxehealth), Sam Shah (Director of Digital Development at NHS England), Susan Sinclair (Chief Executive at AT Medics) and Murat Soncul (Head of Information Governance at South London and Maudsley NHS Foundation Trust).



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## CHAPTER 1. INFORMATION SHARING

Technology is changing the way both clinicians and patients can access their data.

Gradual digitisation of patient records from paper to online has enabled clinical information to be shared more easily and rapidly, although the tendency is for it to remain stored in separate electronic silos, rather than across allied systems.

However, with information sharing key to making integrated care a success, there are significant opportunities and challenges to address. Information sharing provides clinicians and other staff working in the health and social care sector a platform to work together for the benefit of the patient, and plan multi-disciplinary care proactively, without having to merge services and organisations.

### Open application programming interfaces (APIs)

Almost two decades ago, a central Government initiative (the National Programme for IT) was an expensive failure and, while the same challenge of combining data from different legacy systems remains, technology that enables data sharing has evolved and become more affordable. Rather than creating a centrally held record, the focus now is on open APIs<sup>2</sup> that can bring in real-time data from multiple sources, with the use of public cloud enabling these platforms to be extremely adaptable.

"We are now seeing a move where standards are being adopted across the system, which means in time data will become much more accessible to clinicians and eventually for patients as well," says Sam Shah, Director of Digital Development at NHS England.

While historically the NHS has been reliant on big IT suppliers to provide top-down solutions, the use of APIs means that this is no longer the case. "It will be easier to have small and medium-sized enterprises that meet those standards that can work with other suppliers," says Shah.

"We need to work hard on improving market access, which is not easy because of the historic contracts in place."

Sam Shah, Director of Digital Development at NHS England

"We need to work hard on improving market access, which is not easy because of the historic contracts in place. There are reasons why many systems existed, and their primary use may have been for something else. That means there may have to be difficult conversations and it may require the community of buyers to work differently as well."

## Local solutions

The focus needs to be on local organisations working together to create tailored solutions that meet their needs.

Trusts in south-east London have developed such a platform, enabling hospitals to access patient information from GP records which previously they were not able to do.

Every trust uses a different electronic patient records system, explains Murat Soncul, Head of Information Governance at South London and Maudsley NHS Foundation Trust. "For years we had these isolated systems that didn't speak to each other, so sadly we often ended up sending faxes or post to the GP."

The existence of the new platform means that doctors can access test results immediately during a consultation, rather than needing another appointment. Patients can opt out but are warned this may have an adverse impact on their post-discharge care, Soncul says.

NHS England has allocated funding to the regions to link up patient information, so a London-wide project has just started. Soncul notes that: "In big cities you don't just live in one borough, you move around so it is very important to be able to link up records. It is still early at the public engagement phase though. Nothing technical has happened yet."

All patient data at the Trust is now stored on the cloud, as part of its digital strategy, which began in 2015. The strategy has also involved the implementation of digital collaboration tools that enable staff to communicate via instant messaging and sharing of documents. Unlike WhatsApp, the instant messaging system keeps an audit of conversations that can be accessed if necessary, for

**"Technology will always be ahead of legislation because legislation normally reacts to technology."**

**Murat Soncul, Head of Information Governance at South London and Maudsley NHS Foundation Trust**

example to investigate the lead up to a clinical error, says Soncul.

## The time is right for change

Soncul says several other trusts have embarked on similar programmes because the environment was right for making the change. "In the NHS people are quite risk averse, and there was hesitation over some of the technology that has become more commonplace in the last few years, such as cloud technology and some of the mobile apps. We had more examples of technology used in a sensible way, without risking data, and improving clinical care. That has reduced people's hesitation and anxiety and made them more accepting of technology."

He adds that there has also been more funding available from NHS Digital and other NHS funding streams. This includes the local health care record exemplar programme from NHS England.

"Technology will always be ahead of legislation because legislation normally reacts to technology. Personally, I would like regulation to positively shape data governance safeguards around the use of digital technology," Soncul says, and describes the 2018 Data Protection Act as a welcome step forward in updating the legislative framework to take account of advances in digital technology over the past 20 years.<sup>3</sup>

There has also been a big roll-out of role-appropriate desktop and mobile technology to staff at the Trust. But challenges in training staff to use new

devices remain. There is also significant work to do in change management to expel long-held attitudes and update historic working practices.

West London NHS Trust has an ongoing ambition to encourage more mobile working, says Christopher Hilton, Director of Strategy and Clinical Director for Integrated Care at West London NHS Trust. "Historically, some elements of the workforce would do home visits then return to the office to write up their notes. By deploying more mobile devices, which can securely and speedily access the trust network, our hope is to support staff to write up their reports while with the patient or in between community visits."

## NHS App

Greater empowerment and awareness of patients' rights over their information means patients are now encouraged to be actively in control of their data, says Shah. "We are certainly seeing a shift in the powerbase, where the citizen is more in control. They are not just agents or passive recipients. They are actively in control of their healthcare information."

The new NHS App – a collection of evolving tools and techniques – enables patients to take more control and order repeat prescriptions, make appointments, state their preferences for organ donation and end-of-life care, and gain access to third-party technology products to support their efforts in self-care. Potentially, it will also enable more widespread data sharing with the care sector and private hospitals.

## CHAPTER 1.

## INFORMATION SHARING, CONTINUED

Patients will be able to access the NHS App using their NHS login, says Shah. "In time we hope that as the NHS grows in its use of technology, the NHS login becomes the mechanism by which products that are used within the NHS will also give citizens access." For example, if a local integrated care system or a hospital is using a product that is patient facing, patients will be able to use their NHS login to access it and their preferences, including on data sharing, that will be carried across to these third-party products.

"Technology offers the opportunity to improve the accessibility and availability of services. We are a long way from the delivery of clinical services through the use of technology, but we are much closer to being able to reduce the friction and make it easier to access services, and to make their availability more known to individuals," says Shah. "Within the next three years, those are the things we will focus on - getting the basics right. In the following two years, it will be about building more capability, going from transference to transformance. Eventually we hope to adapt and start building new types of technology to improve the delivery of care."

Darryn Hale, Associate at DAC Beachcroft, has been working with NHS commissioners and providers, as well as private sector

technology providers, on projects across London to facilitate arrangements between primary, secondary and social care to share patient data. Hale comments that: "Integrated services have huge potential benefits for patient care. Sharing the right information at scale can help commissioners and providers proactively plan care for the most vulnerable patients by adopting a population health approach with the data."

He highlights the National Data Guardian and the Secretary of State for Health and Social Care's clearly avowed aspiration increasingly to embrace technology. "There is a real opportunity to implement information sharing arrangements to benefit patients in the short, medium and long term," says Hale. "But information sharing on this scale must take place in a manner that is secure, ethical and fully compliant with the onerous requirements of data protection legislation."

"It must all be underpinned by robust legal compliance-assurance, as well as good governance. We have worked on a number of arrangements, and whilst the sharing of risk across very different organisations in the NHS landscape is challenging, finding a mutually agreeable solution is certainly possible."





## CHAPTER 2. PRIMARY CARE

The commitment to digital-first primary care is clearly stated in the NHS Long Term Plan. What are the challenges and opportunities for digitally enabled primary care?

Within five years all patients will have the right to use digital-first primary care, NHS England has promised under its NHS Long Term Plan, either from their own practice or from one of the new digital-first providers.

A new framework will be created for digital suppliers to offer their services to primary care networks on standard NHS terms. Furthermore, NHS England says, this will ensure new 'digital-first' practices are safe, while the whole NHS current out-of-area arrangements will be reviewed and the GP payment formulae adjusted.

The ability to share patient information across several services is key for NHS England's vision, which centres on expanded multidisciplinary teams of community and social services aligned with groups of GP practices. Alongside this, outpatient pathways will be redesigned to avoid unnecessary appointments, meaning more care and follow-up will take place

in primary care with online support from consultants, and rapid referral to virtual clinics when necessary.

### **New ways of working**

Some GP practices already offer patients the option of telephone or online consultations, saving waiting and travelling time.

AT Medics, London's largest primary care provider, cares for more than 270,000 patients and is one of the growing number of GP Practices that use telephone triage, says Susan Sinclair, Chief Executive at AT Medics. "Telephone triage helps patients get support quickly and get a resolution to their query without having to come in and have an appointment."

Sinclair applauds the inclusion of a dedicated chapter in the NHS Long Term Plan on digitally-enabled care, saying this shows recognition that it needs to be a 'key enabler' to NHS reform.

While early adopters of digital health have tended to be younger, older people will eventually get on board, predicts Sinclair. "Digital care has a huge amount to offer people with long-term conditions who spend more time in GP surgeries, and other health appointments. Digital support can give the patient autonomy, and allow effective information sharing between the patient and their healthcare team. Digital healthcare provides the opportunity for patient empowerment, allowing them to monitor and manage their condition."

West London NHS Trust is working with the GP-led social enterprise London Central and West Unscheduled Care Collaborative (LCW), which runs NHS 111 and out-of-hours GP services in parts of north-west London, to provide video conferencing support to care homes. Rather than call the rapid response team or an ambulance immediately, care home

## CHAPTER 2.

## PRIMARY CARE, CONTINUED

staff can now bypass usual 111 pathways and discuss a patient, in some cases by video conference, with an advanced nurse practitioner, who could perhaps also have some face-to-face contact with the patient to support the discussion.

"As we test new infrastructure deployed across north-west London's care homes, we can see huge potential for this. We have worked hard with commissioning groups, supported by social finance, to put all of the necessary information sharing protocols in place, and we're engaging with the staff in the homes themselves. We're already seeing promising results that this new tool will improve care for this population, and reduce the historically high use of emergency services," says Christopher Hilton, Director of Strategy and Clinical Director for Integrated Care at the Trust.

### Digital-first providers

Dedicated digital-first providers are emerging. One of these is GP at Hand, which has more than 40,000 people registered as NHS patients through its central practice in Hammersmith and Fulham, west London.

There has been some initial resistance to digital-first providers based on concerns that digital-first services favour younger and healthier patients, potentially creating a two-tier service. NHS England is reviewing whether any changes need to be made to the general practice funding to address this. However, the commitment to digital-first primary care is clearly

articulated in the NHS Long Term Plan, with every patient in England to have the right to choose digital consultations by 2023/24.

"The barrier to upscaling innovation is people's willingness to judge that a service is at least as good as the alternative and so let it go live, whilst improving the legislative, regulatory or IT framework in parallel versus hiding behind the fact that everything isn't yet perfect," says Paul Bate, Managing Director, NHS Services at Babylon Health.

The technology developed by Babylon and used by Babylon GP at Hand also helps GPs work more efficiently, Bate says. Eventually, the computer will produce a transcript, auto-code the notes and extract any information required for Quality and Outcomes Framework payments ... all for validation and sign-off by the GP. Video consultations are already all recorded and stored, and so can be reviewed by patients and doctors as required.

During video consultations, Bate says: "In future we will be able to run scanning over the patient's face, so, if they are concerned about anything the doctor says, or they might be in pain and have not said, it's another clue for the doctor."

Normally an audit of a past consultation would have only the limited summary made by the GP, Bate explains. "In our situation you have all the information that the AI provided, as well as what the person provided to the AI. You also have a full

video recording of the GP appointment - there is no 'he said she said'."

GPs providing video consultations must have indemnity coverage like other GPs, and Babylon has "very significant insurance for anything that might go wrong with the technology", he adds.

### Using data proactively to improve health

Babylon has recently launched an AI-powered health check that helps its registered patients understand how their physical and mental health may be affected by current and past lifestyle choices, as well as medical and family history. Currently this is questionnaire based, but in the future the aim is to incorporate information from genome analysis and wearables. That information is then used to build a digital twin that assesses the patient on their risk of 20 diseases, how that compares with risk in others of the same age and gender, and what they could do to reduce their risk.

AT Medics are also increasingly using data to support the care they provide.

While data from wearables is available to such practices, it is rarely used to inform care at an individual level. Sinclair predicts that will change with increasing patient expectations, and as devices and systems for integrating data evolve.

However, what has been 'a game changer' for AT Medics, which has 270,000 registered patients, is its development of its own analytics tool to look at population health data to improve care at scale.

"The use of large-scale data to evaluate, plan and improve care has been a game-changer for us, and we've invested significantly in developing our own in-house tool for population health

**"The barrier to upscaling innovation is people's willingness to judge that a service is at least as good as the alternative."**

**Paul Bate, Managing Director, NHS Services at Babylon Health**



“Once you see the data, you are able to work out what capacity you need and you can monitor the improvement.”

**Susan Sinclair, Chief Executive at AT Medics.**

management. Our analytics focus has been clinically driven by expert GPs, embedding effective design and visualisation to make it easier to use. This has been extremely useful, enabling us to prioritise care and make decisions based on the data. It has enabled us to deliver significant improvements, for instance in diabetes and public health,” says Sinclair.

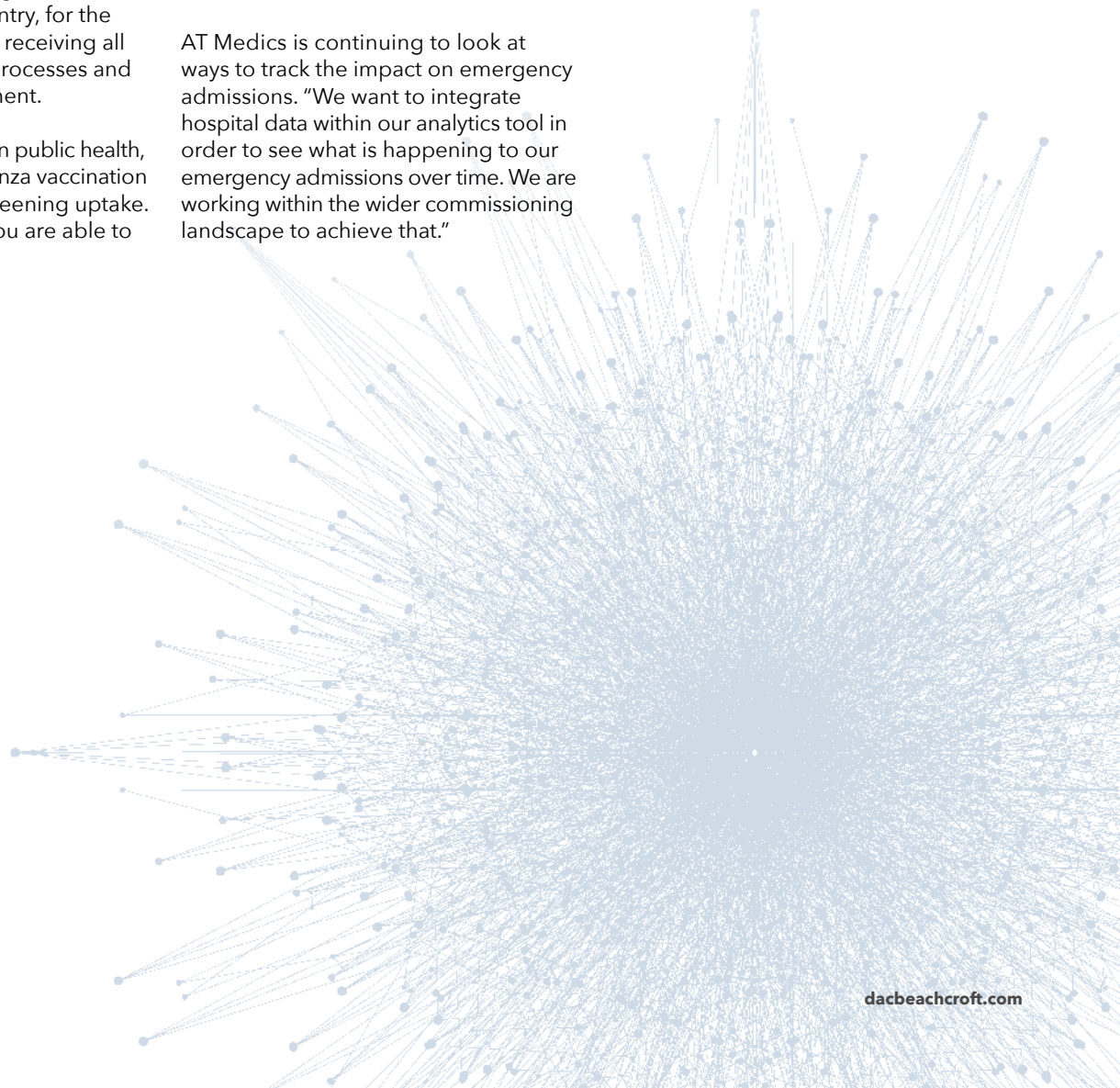
In just over a year, the provider turned around its diabetes management from average to top in the country, for the proportion of its patients, receiving all the recommended care processes and for triple target management.

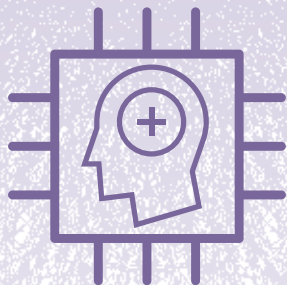
“We have done the same in public health, improving shingles, influenza vaccination coverage and cervical screening uptake. Once you see the data, you are able to

work out where you need to improve, what capacity you need and you can monitor the improvement. You’re also able to get people collaborating and to some extent competing with each other to improve,” she says.

The provider is now using the approach for medicines optimisation by looking at best practice in terms of medicine safety, and taking a very symptomatic approach to ensuring patients are on safe drug combinations.

AT Medics is continuing to look at ways to track the impact on emergency admissions. “We want to integrate hospital data within our analytics tool in order to see what is happening to our emergency admissions over time. We are working within the wider commissioning landscape to achieve that.”





## CHAPTER 3. MENTAL HEALTH

How the mental health sector is leading the way in technology helping vulnerable patients.

Mental health remains a Cinderella service despite repeated Government promises to ensure parity with physical health. For technology it's a two-edged sword: on the one hand limited resources means mental health services cannot afford to gamble on large infrastructure projects and expensive technology; but on the other, overstretched resources means there is a need to innovate to work smarter. As a result, mental health has embraced some of the opportunities around technology faster than acute hospitals.

"Although mental health trusts have been historically relatively underfunded, we have embraced some elements of technology

"Although mental health trusts have been historically relatively underfunded, we have embraced some elements of technology far faster than the acute sector."

Christopher Hilton, Director of Strategy and Clinical Director for Integrated Care at West London NHS Trust

far faster than the acute sector. You would struggle to find a mental health trust that doesn't have a very well-established electronic patient record system," says Christopher Hilton, Director of Strategy and Clinical Director for Integrated Care at West London NHS Trust.

### Engaging patients digitally

Mental health service providers in north-west London have been piloting allowing some patients - those experiencing their first episode of psychosis - access to part of their mental health record. Previously, there has been a nervousness about sharing that information with patients, but that is changing, according to Hilton.

Patients can refer themselves for psychological therapy provided online or through mobile applications, with the support of a therapist (in addition to the traditional face-to-face modalities), through the NHS Improving Access to Psychological Therapies (IAPT) programme. NHS England is working with the National Institute for Health and Care Excellence to support a new, digitally-enabled therapy assessment programme, where up to 14 digital therapy products will be assessed for use in IAPT services by 2020. Five therapies have been evaluated and accepted so far.<sup>4</sup>

Therapists providing digitally-enabled therapy through West London's Back on Track IAPT service in north-west London, have contact with patients through the portal, and are exploring offering remote face-to-face video consultations, explains Hilton, who is a consultant psychiatrist. "You could hypothesise that mental health interventions, which rely on verbal



## "Mental health interventions may more readily lend themselves to remote consultation."

Christopher Hilton, Director of Strategy and Clinical Director for Integrated Care at West London NHS Trust

communication rather than physical contact, may more readily lend themselves to remote consultation."

South London and Maudsley NHS Foundation Trust is already using video consultations to assess patients' suitability for highly-specialised mental health services. Previously, many patients travelled a long distance for an assessment and then found they were not suitable for the service.

### Monitoring vulnerable patients

Several sectors within the health and care system are faced with what is known as the corridor problem – how to monitor vulnerable patients, such as those who might self-harm, get out of bed in the night and fall, stop breathing, or experience other difficulties, when they are in their own rooms. And mental health is now taking the lead in using a piece of technology called the Digital Care Assistant (DCA), developed by Oxehealth, to solve it.

Traditionally, a staff member would have to go and check on a vulnerable patient by doing a risk assessment at regular intervals – sometimes as frequently as every 15 minutes in mental health. This is both labour intensive and disturbing for the patient, and only picks up problems at the specific times patients are assessed.

The DCA is able to monitor patients using the digital feed generated from an optical sensor in the patient's room that picks up light and movement. The system can determine the patient's pulse and breathing rate, and alert staff if the patient gets out of bed, leaves the room or

spends longer than normal in the bathroom. Staff can then go and check on the patient or switch on the video feed.

The system is also able to automatically generate reports on whether the patient got out of bed and how frequently they visited the bathroom, which can give insights into the patient's behaviour that might aid their care.

"We are developing outcomes data in working age adults and older adults in mental health and that is showing a very significant reduction in injuries and reducing staff time spent on safety observations instead of healthcare delivery, and therefore improvements in patient outcomes and staff experience and cost," says Hugh Lloyd-Jukes, Chief Executive at Oxehealth.

In England, the system is being used by 16% of mental health trusts, and some prisons and police custody services. Gill Weatherill, Partner and specialist in mental health law at DAC Beachcroft notes that: "Patients in mental health services often present with complex physical needs. The CQC has repeatedly identified the need for improved monitoring and escalation to address those needs. Technology offers clear opportunities in this area, whether in

improving information sharing between providers (which will in turn improve quality and reduce risk), or in facilitating resource intensive observations.

"However, any reliance on technology as an alternative to well-established staffing expectations will be subject to regulator and public scrutiny and will require robust governance processes to minimise any risk of patient safety failures."

Any slowness of uptake of innovation is mostly related to the challenge of a lack of funding rather than regulation, Lloyd-Jukes says. "We are not held back by regulation. We actually like the rigour of the Caldicott Guardian system; we value that, we require our customers to review and agree our detailed privacy impact assessment as part of our contract."

In Sweden, the system is being used in care homes and will also be tested in some private homes where there is well-developed homecare.

"We put it where there is a professional who is going to be able to intervene, because we don't want lots of information and no one able to respond to it," says Lloyd-Jukes.

"Homecare is absolutely a place where this technology could go, but in the UK monitoring services are not set up to respond to this information. That is why we are developing our care home solution in Sweden, because municipal health and social care budgets are connected.

## "We are developing our care home solution in Sweden, because municipal health and social care budgets are connected ... The challenge in the UK is that the health and social care systems are separate."

Hugh Lloyd-Jukes, Chief Executive at Oxehealth



## CHAPTER 3.

## MENTAL HEALTH, CONTINUED

"The challenge in the UK is that the health and social care systems are separate, whereas in Sweden there is an integrated approach. If you get somebody out of hospital earlier, you get the saving in the budget where you have to spend to look after them at home. They have monitoring centres and they have teams of care workers to provide help in the home."

West London NHS Trust tested the DCA system in Broadmoor Hospital, and found it promising, Hilton says. As a result, they are now piloting the use of the devices in clinical areas and exploring opportunities to deploy them more widely in the new purpose-built facilities that will open in the next few months. "These devices offer additional support for nursing staff to maintain safe care, by allowing improved monitoring of patients whilst reducing the need to disturb their rest," explains Hilton.

**Using analytics to improve care**

Analytics are being used increasingly in mental health to improve care. For example, in north-west London, primary care, acute and mental health providers are feeding data into dashboards. One dashboard enables clinicians to determine whether the physical health needs of mental health patients, who die on average 20 years prematurely and may not engage regularly with other services, are being met. Clinicians in mental health services can check whether the patient has been assessed for diabetes or for smoking status, for example, and then act on it.

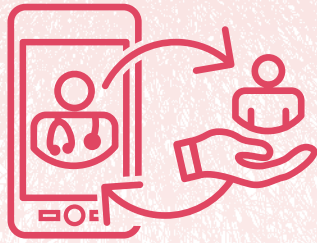
Even when the data is billing rather than clinical, it allows clinicians to see a patient's overall health service utilisation, which tells a story. "You can see that very often there has been very limited healthcare utilisation and suddenly it has increased. You can hypothesise that something happened in their life," explains Hilton.

**Improving care for patients in crisis**

Ambulance staff and paramedics are frequently the first point of contact for patients with mental health issues, especially at times of crisis. Yet A&E is rarely the place where they will receive the best tailored care to their immediate needs.

In November 2018, NHS Digital launched a National Record Locator (NRL), which will eventually allow health and care professionals and providers to securely locate and identify patient records elsewhere in the health system. The first phase of the project is trialling the service with local shared record providers, ambulance services and mental health trusts in the North West, North East, Yorkshire and London.

Murat Soncul, Head of Information Governance at South London and Maudsley NHS Foundation Trust explains: "When called out, ambulance staff can see if that person has engaged with the mental health service in the past, so they don't automatically take that person to A&E. Instead they can take them to a psychiatric facility, which will save a lot of time and be better for the patient."



## IN SUMMARY

As this report highlights, the implementation of technology is improving patient care. The insights from our contributors, along with our own experience advising clients in the sector, lead to a number of conclusions.

- **Don't let perfect be the enemy of good.** Regulation will often play catch-up to transformative technology. It is important to ensure that proper risk assessment takes place with regard to the technology being implemented, to ensure patient safety. This should be coupled with open dialogue with regulators to shape any new regulation required.
- **Clarity around the regulatory and reimbursement framework is critical.** A clear reimbursement mechanism, regulatory framework and minimum standards for new healthcare technologies will be critical for external investment. The picture is becoming clearer on standards, with the Department of Health and Social Care publishing a Code of Conduct for data driven health and care technology along with the recent publication of NICE's Evidence Standards Framework for Digital Health Technologies.
- **We are not starting with a blank sheet of paper.** Technology systems across the health and social care sector are fragmented, and we cannot start with a blank piece of paper. Interoperability solutions can help in some circumstances and are being implemented in the NHS.
- **Local is important, but fragmentation may hinder adoption.** A coherent strategy is required, transcending organisational boundaries, to implement technology. STPs and ICSs require both the funding and expertise to implement the strategy and commission the tech. The fragmented health and social care landscape might slow down adoption.
- **Clinicians, not technology, will drive change.** It will be the clinicians implementing the technology, rather than the technology on its own, that will cause transformative change.

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### ENDNOTES

- 1 [www.longtermplan.nhs.uk/wp-content/uploads/2019/01/nhs-long-term-plan.pdf](http://www.longtermplan.nhs.uk/wp-content/uploads/2019/01/nhs-long-term-plan.pdf)
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- 4 [www.nice.org.uk/about/what-we-do/our-programmes/nice-advice/improving-access-to-psychological-therapies-iapt-submitting-a-product-to-iapt#published-IABs](http://www.nice.org.uk/about/what-we-do/our-programmes/nice-advice/improving-access-to-psychological-therapies-iapt-submitting-a-product-to-iapt#published-IABs)

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