



Health Cloud:

Taking the NHS beyond digital adoption to deliver closer collaboration, improved patient outcomes and lasting transformation



Health Cloud: I



IT and the NHS: An unsustainable status quo

The digitisation of the NHS is by no means a new concept. Technology has long been seen as a critical driver in overcoming mounting waiting lists, evolving care requirements, increasing patient expectations and a workforce often stretched beyond its limits.

However, as trusts up and down the country contend with the increasingly complex needs of a growing and ageing population – on top of the lasting impact of a global pandemic – progress has been decidedly slow.

Evaluation of Government commitments made on the digitisation of the NHS:

Inadequate. Fourth Special Report of Session **2022–23**¹

Despite considerable digital adoption within individual NHS organisations, little has changed in the way trusts communicate, connect patient data and deliver care across channels and departments.

An example of this contrast is evident in the fact that almost 90%² of NHS organisations have switched to electronic patient records, yet almost three-quarters still host the majority of data and applications on legacy, on-premise architecture³.

As a result, the full potential of digitalisation to improve efficiency, productivity, and staff and patient experiences has yet to be realised. At the same time, siloed, legacy and patchwork systems place a considerable operational and financial burden on the health service.

Counting the cost of 'IT as usual'



Disjointed care

Despite the adoption of digital systems, patient data is still routinely shared in a transactional manner. This leaves care providers without access to vital information during initial consultation, resulting in delays, inefficient diagnoses and inadequate service.



Readability and stability

Legacy hardware is more prone to downtime and outages, potentially leading to significant interruptions to patient care.

Decreasing reliability and performance over time leads to increased maintenance, servicing, and repair costs.



Compliance and data protection

Implementing robust compliance controls across mixed, legacy IT estates is a growing challenge. Protecting data in this environment can be counterproductive to the efficient delivery of care.



Meeting demand

Legacy on-premise architecture is subject to capacity limitations. Scaling such solutions to meet demand requires cumbersome and costly technology upgrades. Continuing to operate this way places an excessive and unnecessary burden on limited capital expenditure.



Exposure to cyber risk

Cyber security attacks on the UK healthcare sector increased by 77% in 2022, with over 64% of organisations cancelling in-person appointments as a result.⁴

High volumes of sensitive data and a vital need for uninterrupted service make the NHS a prime target for ransomware and other devastating cyber attacks. Legacy, on-premise technology is not fit to withstand modern cyber threats, putting patient data and care provision at an increased risk.



Staff wellbeing

Disjointed, patchwork IT systems not only impede efficient patient care. They also take a toll on our people.

Around a third of NHS frontline staff do not feel their managers have access to the modern technology required to deliver consistent and accurate employee appraisal. At the same time, 50% say a lack of technology investment hinders staff wellbeing and career progression.⁵

An appetite for change

NHS staff are well aware of the challenges they face – and confident in the ability of digital and cloud technology to overcome them.

Three quarters believe that the adoption of health tech has already improved healthcare standards across the UK thanks to increased collaboration with colleagues (70%), and improved training (56%), knowledge sharing (52%) and record keeping (48%).

However, the broad consensus remains that the NHS is a long way behind other sectors.

Over two-thirds (72%) of those using digital tech in the NHS every day believe it is being held back by a lack of integration with other legacy technologies. Others (48%) complain that disjointed systems lead to duplication of work and inefficient processes.

These frustrations lead the majority of NHS staff to consider further investment in technology a top priority, with most believing it will help to reduce waiting lists, cut costs and improve patient outcomes.

To achieve these aims, four in five NHS staff have called for urgent collaboration between public and private sectors to deliver on the promise of the NHS's Digital Transformation Strategy and Long Term Plan.⁶

NHS staff are right to be confident. Because while the health service undoubtedly faces many varied and complex challenges, technology adoption does not have to be one of them.

On the contrary, the cloud ecosystem, partner expertise and stakeholder buy-in now exist for technology to solve these problems and deliver sustainable, secure and efficient ways of working across the NHS.



Health Cloud: II

Giving you the freedom to care – everywhere

As demonstrated by numerous industries in recent years, the true value of technology investment is not necessarily in digitising existing ways of working but in rethinking them entirely.

Due to a combination of prioritisation, resourcing and financial constraints, healthcare has so far struggled to revolutionise practices in quite the same way as the banking, retail and travel industries before it.

However, the sector's current model is quite simply no longer sustainable. To overcome its mounting challenges, healthcare must follow suit and move beyond the stage of digital adoption into the transformation of its entire operation.

Migration from on-premise environments to cloud solutions is pivotal to this digital evolution. However, cloud adoption is not a one-size-fits-all solution that can be applied uniformly across the entire NHS.

Health Cloud can help. BT, in partnership with Dell, delivers a hybrid model, hosting workloads and data in the public cloud, a private cloud or a colocation arrangement. We co-design with NHS trusts to migrate and host workloads wherever they are needed most, depending on the needs of the organisation, staff and patients.





The pathway to a new way of working

Migrating to the Health Cloud is not a one-off upgrade or technology refresh. By moving to a “cloud appropriate” solution built exclusively for the healthcare sector, NHS trusts can quickly and seamlessly transition from current IT environments to where they need to be – on reliable infrastructure equipped for the numerous challenges of today and tomorrow.

A roadmap to end-to-end digital health transformation

Adoption

The Health Cloud framework helps NHS trusts assess their current IT environment and identify workloads for cloud migration.

Optimisation

Putting the right information in the right environments at the right time helps to maximise IT estates, saving time, money and resources.

Innovation

Cloud models increase the speed of information, potentially reducing wait times and improving patient outcomes.

Benefits of a Health Cloud Model

The potential impact of moving to a health cloud model is difficult to overstate. Cloud migration is predicted to save UK healthcare providers over £14 billion across the next five years. NHS trusts can also save up to 83% on egress charges when transforming operations with BT and its partner network.

Cost-effectiveness

Avoid the upfront costs of buying and maintaining hardware while benefitting from flexible pricing.

Secure data storage

Keep valuable healthcare data in a central location, protected by robust security and compliance protocols.

Sustainability

Reduce your carbon footprint by moving data from on-site servers to energy efficient data centres.



Better Patient Experiences

Share data proactively across trusts to deliver higher levels of care across channels and departments.

Easy access

Let staff collaborate and share data from anywhere and across your integrated care system.

Improved efficiency

Get the right environment for the right workloads and data.

Scalability

Health Cloud gives you an ideal platform for storing and analysing big data.

Health Cloud: III

Taking NHS trusts infrastructure-free

A more efficient way of working, powered by the cloud, is not a hypothetical future for the NHS. We have already made it a reality for trusts across the UK.

With the support of Dell and our extensive partner network, BT delivered the Health Cloud solution to a large acute trust, enabling it to modernise infrastructure, remove legacy hardware from hospital environments and become the primary tenant for a connected, collaborative regional cloud platform.

Our bespoke system connected a local data centre with an existing optical connection to allow providers across the region to securely access and share patient data, including blood test results, imaging and research data.

Increasing efficiency in blood and transplant services

Our Health Cloud solutions helped NHS Blood and Transplant (NHSBT) migrate from intensive processes to faster, more efficient alternatives.

We worked together to remove unnecessary manual elements from the blood donation process while moving selected workloads and software applications into the cloud for greater efficiency.

NHSBT can now offer a faster, more streamlined and consistent service supported by one central cloud platform. The result is vastly improved outcomes for patients and NHS staff, with blood delivered within minutes of collection.

Removing siloes and improving patient care

Our Health Cloud solution has helped trusts in the northwest of England to support joined-up, efficient care throughout the region.

By migrating workloads across private cloud environments, we have helped multiple NHS organisations minimise the cost of maintaining legacy hardware, share data quickly and proactively across trusts, and drive closer collaboration between NHS departments.

As well as driving greater efficiency, our Health Cloud solution allows NHS staff to identify a patient's journey throughout the healthcare system and deliver more consistent, personalised care on a daily basis.



Health Cloud: IV

BT and the NHS: A legacy of trust. A vision of the future.

BT has supported critical NHS services for over six decades, successfully delivering emergency call centres, blue light communications, the Spine/N3 secure broadband network and much more.

At the same time, Dell hardware has provided the IT backbone for NHS organisations for over 30 years.

We are much more than telecoms and IT providers to the health service. We are long-term trusted partners aligned in our values and our vision to deliver reliable, secure and cost-efficient services – to trusts, staff and patients.



Our solutions are made for and with the NHS

Through BT's Vanguard programme and Clinical Advisory Board, we co-create with healthcare leaders and frontline staff to develop innovations based on real-world insights.



When the NHS needs us, we're there

BT works in partnership with clinical leadership on the frontline of the NHS. We offer round-the-clock security and support as well as robust, reliable connectivity.



We invest in the best

BT spends more on research and development than any other UK network to deliver on our aim to be the country's most trusted provider of secure connectivity and collaboration.

¹ www.committees.parliament.uk	Page 3
² www.transform.england.nhs.uk	Page 3
³ NHS Cloud Centre of Excellence Survey 2022	Page 3
⁴ www.knowbe4.com	Page 4
⁵ www.news.sap.com	Page 4
⁶ www.newsroom.bt.com	Page 5



Let's work together to improve our health service

Our industry-leading cloud technology ecosystem is ready to deliver the best possible solutions to NHS trusts.

Want to know more?

 business.bt.com