



CARING FOR
THE NHS
WORKFORCE

Looking After Your Own

EXECUTIVE SUMMARY

The role of technology
in supporting wellbeing
amongst NHS staff.

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ECONOMICS

This report focuses on one important element of that strategy: technology.

Across the NHS, a weak digital foundation and outdated technology are contributing to work-related stress.

Caring for the NHS workforce: the role of technology in supporting wellbeing amongst NHS staff

There are approximately **1.4 million people** employed throughout the NHS. Each individual plays a vital role in improving the health of the nation, which has been more important than ever over the past months. But if those who care for us are to continue to carry out their jobs effectively, then as a society we need to consider their health more carefully. A healthy NHS workforce is fundamental to the Government's health and social care strategy, and it is encouraging that the Secretary of State has identified the workforce as his top priority.

This report aims to contribute to this debate. The findings identify a **crisis in mental health amongst the NHS workforce** and the impacts that stress, anxiety and burnout have on healthcare workers, patients and the overall costs of the NHS.

Improving the mental health of NHS workers will require a wide-ranging strategy which includes improved workforce management practices and support, and action to prevent mental ill-health occurring in the first place. This report focusses on one important element of that strategy: **technology**. It highlights that, across the NHS, a weak digital foundation and outdated technology in use by the NHS workforce are contributing to **work-related stress** and impacting patient outcomes and the ability of the NHS to operate as efficiently as possible.

The government has vowed to move the health and care system into the 21st century. Across the country there are trailblazing hospitals which, as a result of their expertise and investment, are able to ensure both that their technology works for their staff and their digital foundation is ready for the required evolution that will be asked of them while also allowing future innovations to be tested and implemented at scale. Yet there are many hospitals which are still lagging behind.

This report highlights the need for NHSX, a new unit tasked with speeding up the digital transformation required within the NHS, to be closely involved in the NHS's People Plan to ensure that the importance of digital transformation in helping to tackle mental ill-health amongst the NHS workforce is recognised and operationalised.

It then outlines the need to create the right digital foundation across the NHS; providing a cloud environment to meet Trusts' needs, with **adaptable networking and security provided** where and how they are needed by the NHS workforce. In practical terms, this would support the adoption of technologies that can improve workforce wellbeing and clinical outcomes, as well as reduce costs, both now and in the future.



...these figures suggest that more than 10 million working days were lost to mental ill-health in the NHS in 2019.

Source: WPI Economics,
HSE, NHS Digital

The scale of the mental ill-health crisis in the NHS

A wide range of evidence shows that mental ill-health is a significant issue across the professions within the NHS workforce. A related and equally significant issue is burnout.

Using data from NHS Trusts and the Health and Safety Executive (HSE), this report estimates that more than 10 million working days were lost to mental ill-health in the NHS across the UK in 2019. This equates to around 38,500 full-time staff permanently absent from work, needing to be covered by other staff or temporarily replaced by agency staff.

Put another way, this level of mental-ill-health-related sickness absence amounts, on average, to more than seven days off work a year for each employee.

The impact of mental health on the NHS workforce

However, as already highlighted, investment on its own is not enough. This report explores key themes taken from semi-structured interviews and roundtables with business leaders to show that, across the country, there is broad agreement on what needs to happen. Based on these themes and our own analysis, our key recommendations are:



Worsened clinical outcomes. A range of evidence demonstrates a clear link between mental ill-health amongst the NHS workforce and poorer clinical outcomes.



The associated costs of mental-ill-health-related sickness absence and presenteeism to the NHS as an employer, which we estimate amounted to around **£3 billion in 2019**.



Personal impacts. The human costs are significant; both for individuals experiencing mental ill-health and their friends, families and colleagues.



Technology as part of the solution

This is not the first report to highlight these issues and NHS reviews have also focussed on them. So, the question is: what can be done? The first thing is to recognise that the drivers of mental ill-health in the NHS are not just about the often unavoidable nature of working in healthcare; a range of organisational factors are also significant drivers. Addressing these should play an important part of a strategy to tackle the issue. Key areas highlighted by other reviews include:

- Reducing and managing workloads
- Helping the NHS workforce to navigate the growing intensity and complexity of work
- Increasing control and support, whilst providing more opportunities to work flexibly

Delivering on each of these areas could fundamentally change the experience of the NHS workforce. There is no single way to do this, and a multi-faceted strategy is clearly needed.



**6 in 10
NHS healthcare professionals
believe that NHS IT
is not fit for purpose.**

“Clinicians waste valuable time with their patients, logging on to multiple systems on aged devices. Many clinical systems are not designed to complement how they treat and care for their patients.”

Reducing and managing workloads

It is well documented that technological inadequacies in the NHS are linked with increased workload, challenges in managing complexity of work, poor control over work, work-life balance and a lack of flexible working. As such, there are clear routes through which poor technology can impact the mental health of the NHS workforce. A recent survey of BMA members indicated the scale of some of the issues; with **four in ten respondents** (37%) reporting that their stress levels are affected significantly by inefficient IT and data-sharing systems.

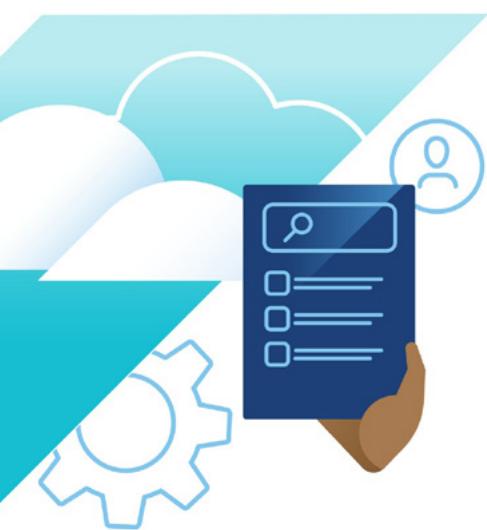
At the heart of these issues are hardware and software which are no longer fit for purpose and legacy IT systems that hinder attempts of digital transformation. A recent survey of NHS healthcare professionals found that six in ten thought that NHS IT was not fit for purpose, with many complaining of 10-minute log-on times for tasks that need to be done several times a day.

Wider concerns include a **lack of interoperability** that means that different systems across the health and social care system, and even within different departments of the same care setting, do not integrate or communicate effectively with each other. One example of the impact of this is that patients have to provide their medical histories repeatedly and clinicians may have to enter the same information several times.

This situation also comes with broader concerns. For example, interviewees for this report highlighted that medical staff are currently forced to create workarounds to save time: for instance leaving computers logged on, or even sharing patient records over personal e-mail or WhatsApp to get an opinion from a colleague without the requisite access tools. Whilst not malicious like the recent WannaCry attack on the NHS, the impacts of such actions on security are clear; a third of NHS IT leaders identify NHS staff as a **significant risk to cyber security**.

Whilst these are significant issues, there are clear routes through which they can be tackled, the technology improved and the NHS digitised, whilst ensuring that cyber security is at the heart of that transformation so that patient and staff information is safeguarded. One such example of this is the idea that clinicians should have the right information on a patient in front of them, on any device that they are using and at any time, with the security you would expect when accessing personal medical records.

It is a simple principle, but one that demonstrates how the **right technology would fundamentally change the experience of many clinicians today**: saving time, easing workloads, improving patient care and, as a result, reducing workforce stress. As one CIO interviewed as part of this research commented: “...anything that can save a clinician an extra click, or extra log-on, is something that provides more time for them to spend with the patient.”



Innovation and the future of healthcare

Looking to the future, it is also clear that new forms of working, improved treatments and a wide range of future NHS innovations are part of the answer. Often referred to as the “mega trends” in healthcare, these are typically driven by big data, technology and connectivity. They include: AI, genomics, telemedicine, the medical Internet of Things, virtual reality and augmented reality.

Together, these trends would change the shape and nature of healthcare in the UK; moving much more to a predictive, preventative and personalised approach. They could also do this in a way that improves the working environment of the NHS workforce. For example, it has been estimated that:

- Speech recognition could improve the speed at which clinical documentation is completed, potentially freeing up **400,000 hours of A&E consultant time**, one million hours of outpatient clinic time and **5.7 million hours** of GP consultation time
- Automated image interpretation could reduce the time radiologists require to review images by around **20%**. This would free up close to **900,000 hours** of radiologist time

Whilst many of these technologies are in their infancy, the potential for the future is clear and, alongside action to get the basics right, would radically improve working conditions, workload pressures and ways of working within the NHS.

Delivering this requires the right digital foundation

This demonstrates just a few of the potential areas where improved technology, digital transformation and innovation could ease pressures on the NHS workforce and improve patient outcomes. But despite previous commitments to ensure that all NHS providers have at least a core level of digitisation by 2024, a large proportion of Trusts are currently a very long way from this level, and, without significant change, are unlikely to reach the required level in time.

So the question is then, what is preventing the investment and continued digital transformation that could deliver a step-change in outcomes for clinicians and patients across the NHS?

People working with and outside of the NHS that were interviewed as part of this research, including clinicians, senior managers and technology professionals, identified a range of barriers, which are also echoed in the existing literature around digital transformation in the NHS.

“Clinicians should be able to see patients’ records, observations, results and background notes from any location, ideally in real time.”

An overarching theme from these interviews was that there is currently an insufficient focus on ensuring that the NHS has a strong digital foundation. This was raised in a number of ways. For example, a number of interviewees highlighted that a focus on new and innovative technologies and applications for those on the frontline was taking attention away from the fact that, without the right digital foundation, it would be nearly impossible to make the most of these opportunities. It was also highlighted that a failure to deliver this would likely result in a situation where similar issues with legacy IT being faced in ten years or so.

Ultimately, interviewees argued that delivering improvements will rest on the NHS’s digital foundation. This is what underpins the ability to modernise applications today and in the future, to adapt to, test and adopt new innovations without disrupting operations and all the time doing this in a way that protects patient data. In practical terms, the goal for users was typically described as a foundation that enables any app, on any cloud, delivered to any device. For example, the BMA highlights that “Clinicians should be able to see patients’ records, observations, results and background notes from any location, ideally in real time”.

Any Device



Any App

Cloud Native
Containerised
SaaS
Traditional



Any Cloud

Hybrid Clouds
Edge Computing
Telecom Cloud
Public Clouds



The digital foundation must empower and support that goal in a way that allows Trusts to respond flexibly to future needs, opportunities and threats and adopt innovation, and all in a way that minimises risk and disruption and maintains security.

The elements of a strong digital foundation

A strong digital foundation is central to delivering the technology that the NHS workforce needs today and ensuring that digital transformation can continue into the future. There are three core elements to a strong digital foundation.

A cloud environment to meet Trusts' needs:



As Trusts' applications become more complex, more diverse and increasingly demanding, there are new requirements for the infrastructure that delivers the power, efficiency and interoperability to support them. Delivering this in the right way is central to reducing costs, increasing flexibility & scalability, improving efficiency and speeding up the time to access innovative services that are central to digital transformation within the NHS.

Most importantly, a strong digital foundation lets Trusts choose whichever cloud environment best meets their needs, for any application, without sacrificing visibility, operational consistency, security or control.

With adaptable networking and security:



Intrinsic security is key to ensuring that Trusts build-in and unify security to protect its apps and data. This means interoperability across bare metal servers and containers, as well as on-premises, public cloud, IoT edge devices, or cloud-based services. Given the sensitive nature of data and applications in use within the NHS, securing this across the cloud environment is a core requirement.



Provided where needed by the NHS workforce:

Across the NHS workforce, employees want to do the work they need to do, with easy and highly available access to the tools and apps they want to use. In practice, this must be flexible to the range of devices (from mobile, desktop and tablet to IoT devices) in use across the workforce, and the range of environments (whether that is in a primary, second or secondary settings, on the move or at home) and in a way that does not sacrifice security or control.





A range of other areas, which link with this theme, were also raised. These are summarised below.

- **Money.** Almost universal across interviewees for this report and a wide range of similar work by others was the fact that digital transformation across the NHS is severely constrained by affordability. Interviewees argued that this problem with funding for digital transformation was particularly focussed amongst Trusts that were already less digitally mature, where there is also a growing maturity gap compared to more digitally mature Trusts.
- **Legacy systems.** Legacy technology systems within the NHS are not just ineffective, inflexible and a contributor to mental ill-health amongst staff. They are also expensive to service and maintain and create a range of other barriers identified by interviewees, including making leaders risk averse to change and taking up the mental capacity needed to set a clear vision and strategy for the future.
- **Intangibility of benefits and other priorities.** This was particularly true for the development of a robust digital foundation, rather than applications and hardware used directly by those on the frontline. Some also said that, within constrained budgets, it was easier to invest in “visible” equipment like MRI scanners or fire alarm systems, than cloud solutions, app development or improvements to cyber security. This was exacerbated by a lack of technological expertise on NHS Trust boards.
- **Change management.** Here, it was argued that even where transformation has begun and new technologies are being rolled out, a lack of focus on training and supporting staff to use this technology was presenting a number of challenges.

It is also clear that, too often, digital transformation and workforce wellbeing are viewed in isolation.

Laying the foundations for digital transformation

The five missions of NHSX chime very well with themes in this report. However, tackling the issues identified above, and pushing forward digital transformation at the pace required, will not be straightforward. It is also clear that, too often, digital transformation and workforce wellbeing are viewed in isolation. What this report has shown is that delivering on digital transformation is not just about improving and deploying technology: it could also be part of a strategy to tackle work-related stress and reduce the prevalence of mental ill-health and burnout amongst the NHS workforce.

As such, our headline recommendation is that using digital transformation to improve the wellbeing of the NHS workforce should be a core part of the NHS People Plan. The interim plan has already made positive steps, including the creation of the Releasing Time to Care programme. The final plan should build on this foundation, provide clear routes through which NHSX can be at the heart of future plans in this area and identify investment streams that can support digital transformation.

Recommendations to support the NHS

1. Digital Transformation and the NHS people plan

To reflect the important role of digital transformation in supporting the NHS workforce, it should be a core part of the NHS People Plan.

The plan should also clearly set out how NHSX will be involved in future work in this area and, given the importance to the workforce, identify investment streams that can support digital transformation.

The journey of transformation will be unique to every organisation and complex for all. Disruptive technologies emerge faster than most organisations can absorb, which leads to increasingly complex technology environments that are hard to maintain and even harder to secure. This report has shown that this presents a real challenge of ensuring that the right steps are taken across the NHS and in a way that does not create the legacy IT of the future. In the short term, failure to do so risks the continuation of poor mental health outcomes in many Trusts across the NHS and could mean that in ten- or twenty-years' time, technology is similarly outdated and difficult to upgrade and transform.

What is needed is a framework within which NHSX, Trusts and the digital sector can work together to deliver the digital foundation that can facilitate the adoption of technology that supports staff both now and in the future; getting the basics right first before allowing innovation to deliver the digital NHS of the future. The recommendations below support the delivery of a strategy to achieve the core elements of a strong digital foundation identified in the page above.

2. Digital by default

The Government's manifesto confirmed a pledge to build and fund 40 new hospitals over the next ten years.

It is essential that these are built and the investment is made to deliver the right digital foundation from the outset, ensuring that they can reach the highest levels of digital maturity and that technology can support staff, improve clinical outcomes and reduce costs now and in the future.

To do this, and building on recent announcements from NHSX, all new planned hospitals should appoint advisors from NHSX and from one or more of the Global Digital Exemplars. These advisors should report directly to the CEO of NHSX and the Secretary of State for Health and Social Care, meaning that any concerns around future digital maturity of these new hospitals can then be raised quickly to the highest level.



3. Change comes from the top

Digital transformation is one of the major challenges facing the NHS today.

However, we heard that too often, NHS Trust boards lacked the detailed understanding of technology needed to create and drive forward a digital-first strategy. Supporting this view, the NHS Long Term Plan and, more recently, the Secretary of State have highlighted that every NHS Trust board should have a “digital and tech leader”.

However, progress has been slow, with just 25% of Trusts in England having met this ambition. To tackle this, the CEO of NHSX and Secretary of State should write jointly and publicly to Chairs of all NHS Trust boards currently failing to meet this standard, confirming their expectation that an experienced individual with operational responsibility for digital transformation (e.g. CIO or Chief Clinical Information Officer) should be on their board and setting out a firm timeline for when this will happen.

4. Building the foundations for digital maturity

Based on current progress and funding, we believe that one of the major challenges for NHSX over the next few years will be supporting all Trusts to reach the necessary level of digital maturity by 2024.

This will be particularly challenging for the Trusts with the lowest current level of maturity, where we have already seen that the maturity gap is growing. Another challenge will be to support all Trusts to develop the digital foundation that will ensure they are futureproofed and can harness new technology as quickly and as often as it evolves, without disrupting operations.

NHSX, NHS England and NHS Improvement are already working with providers to develop maturity standards and understand the potential investment required by Trusts to meet these. Once the required standards and funding have been determined, the Government should ringfence part of its increased NHS investment, and bring together other existing funds focussed on investment in digital transformation, to develop a single Smart Care Fund. This should be used to ensure that investment is available to all Trusts to both achieve the required digital maturity standards and ensure they develop a futureproofed and flexible digital foundation.



5. Monitor performance, tackle failure

The need for change is clear and, with the right funding and support available, there is no excuse for Trusts to fail to achieve the required level of digital maturity.

As such, it is encouraging that the Secretary of State has committed to providing all providers with clear standards that the CQC can assess them against. Given its importance, it is vital that this work takes place rapidly and the transformation it should prompt be delivered to a fixed timescale.

As such:

- We urge the Government to recommit to their expectation that all Trusts meet minimum standards by 2024
- Progress against these standards should be reported publicly annually
- As recommended by the Hatcher Review, on the basis of the CQC's assessment, Trusts that fail to meet the required level of digital maturity in 2024 (or, in earlier years, are projected to do so) should be judged to be out of compliance on quality and safety grounds

Taking forward these proposals, improving technology and focussing on the role it can play in improving mental health amongst the NHS workforce, will play a vital role in delivering the NHS of the future. Ultimately, we cannot expect the NHS to provide the care that people across the UK need, unless we care for the NHS workforce too, and improved technology is central to ensuring this happens.



Get in touch

VMware would like to run a free, personalised workshop with you to explore how IT transformation can help ease the burden on your colleagues.

The session will give you the opportunity to share your current transformation plans, explore new ideas and help you create a successful roadmap to improving staff wellbeing.

To find out more, please contact Alastair MacMillan at amacmillab@vmware.com or 01235 608333.



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