# The magic cure for the NHS crisis? Prioritising digital innovations to support NHS Staff





#### **About**

The Health Innovation Network is the Academic Health Science Network (AHSN) for south London, one of 15 AHSNs across England. As the only bodies that connect NHS and academic organisations, local authorities, the third sector and industry, we are catalysts that create the right conditions to facilitate change across whole health and social care economies, with a clear focus on improving outcomes for staff and patients.

AHSNs are positioned as a part of the NHS response to the workforce challenge by demonstrating how innovation can drive efficiencies and improvements in ways of working and delivering care which have impact on workforce numbers, skills, and efficiencies.



### **Background**

The Health Innovation Network (HIN) is a founding partner of DigitalHealth.London (DHL) which connects NHS staff, digital health companies and academics, to support them to improve the NHS and social care in London through digital technology. Since the Covid-19 pandemic, there has been a rapid uptake and adoption of digital and technological solutions used within the NHS with a particular acceleration of the use of digitally-enabled health services. However, it seems that digital workforce solutions have not had the same fast track adoption. There are a wide range of workforce solutions including:

- improving employee well-being eg mental wellbeing apps, menopause support;
- supporting organisational development and retention activities eg online soft skills training, automation solutions;
- digitalising temporary staffing eg digital platforms to manage locum and agency staffing and collaborative digital staff banks across regions;
- streamlining skills and competencies eg digital clinical competency record.

In early December 2022 the HIN and DHL hosted a roundtable discussion with stakeholders exploring adoption challenges, with a particular focus upon the financial and operational complexities of implementing digital workforce technologies. The roundtable was attended by 15 representatives from across industry and NHS stakeholders and generated an honest and interesting discussion on:

- How can digital workforce innovations be prioritised amongst significant operational pressures?
- What are the main challenges of embedding digital workforce solutions?
- What are the opportunities for using digital solutions to optimise the use of temporary and flexible staffing?

This paper intends to stimulate the debate, whilst setting out the key opportunities and challenges for the NHS to make the most of the potential for

fundamental improvements offered by digital tools. Seven recommendations from the roundtable are included.

The HIN would like to thank all those who attended the roundtable and shared their valuable insights.

A list of participants is detailed in the appendix.

## **Current NHS Workforce Challenges**

The health sector is facing a deepening workforce crisis, which has been exacerbated by the Covid-19 pandemic. The latest NHS Digital vacancy statistics showing both overall and nursing vacancies at record high levels of 9.7 per cent and 11.8 per cent respectively. The recent BBC report revealed a rise in agency spend of 20 per cent to £3bn last year<sup>1</sup>, and the latest NHS staff survey detected worsening results in a number of areas including care standards, workload, burnout, resilience and morale, feeling valued and pay satisfaction.<sup>2</sup>

For the first time in history, the Royal College of Nursing's members are taking part in planned strikes to demand fair pay and improved patient safety.

Ambulance workers in parts of the country are striking over pay and NHS physiotherapists have recently been on strike.

While there is no silver bullet to solve these multi-faceted problems, the NHS will need flexible and innovative approaches to tackle the workforce emergency and the dire consequences it is having on its staff. The HIN and DHL are keen to help the NHS harness the potential of digital workforce innovations and we have set out seven recommendations following the roundtable discussion that address these issues.

<sup>&</sup>lt;sup>1</sup> https://www.bbc.co.uk/news/health-63588959

<sup>&</sup>lt;sup>2</sup> NHS Survey Coordination Centre. NHS staff survey 2021: national results briefing. Mar 2022. https://www.nhsstaffsurveys.com/static/423ee2faa3495b47585ce70d25dc4a92/ST21\_National-briefing.pdf

## Prioritising digital workforce innovation at a time of significant pressure

Demand for NHS services was already exceeding capacity before the Covid-19 pandemic, with growing waiting lists for emergency, routine and cancer care. Covid-19 has exacerbated the crisis, with the latest data showing a record number of 7.2 million patients waiting for consultant-led elective care, 2.9 million waiting over 18 weeks and over 410,000 waiting over a year for their treatment.

The performance target (93 per cent) for patients to be seen within two weeks of an urgent referral for suspected cancer was last met in May 2020 and has since dropped to 77 per cent in October 2022. The number of GP referrals to consultant-led outpatient services via the NHS e-Referral Service (e-RS) that have been unsuccessful due to lack of capacity has increased by 87 per cent.<sup>3</sup>

If the NHS is to meet its current and future operational challenges, it is imperative to look at evidence-based digital workforce solutions; whether that is improving the resilience and mental wellbeing of our workforce, or streamlining skills training to make their jobs easier.

A common barrier to digital adoption is that operational teams are constantly "fire-fighting" crises due to increasing demands. Operational and clinical leaders have insufficient time or headspace to focus on how digital solutions could contribute towards improving workforce processes, retention or the overall well-being and morale of our NHS staff. Workforce-focused innovations should be considered by decision-makers as enablers that contribute towards tackling increasing operational pressures, not as a "nice to have". There needs to be a shift in paradigm away from focusing solely on finding and recruiting more staff to one where digital solutions for the workforce are recognised as part of the solution.

<sup>&</sup>lt;sup>3</sup> https://www.bma.org.uk/advice-and-support/nhs-delivery-and-workforce/pressures/nhs-backlog-data-analysis

Furthermore, digital transformation projects often fail to adequately involve operational and frontline staff who have a critical role in successful implementation of solutions that benefit the workforce or make workforce processes more efficient. This can be addressed by clearly defining their problem areas and using regional AHSNs to help identify and review relevant innovations on the market.

#### **Recommendation 1**

To allow time and "head space" NHS organisations should prioritise and realise the return on investing in this important engagement. They can do this by providing protected time for frontline operational staff and clinical champions to co-design and implement digital workforce solutions. Maximising the support that AHSNs can provide to reduce the time required for frontline staff to contribute and make the process efficient as possible.

Taking a culture-change approach increases the likelihood of successful digital transformation for both staff and patients. Successful transformation programmes demonstrate the crucial role that clinical leaders have in enabling adoption of technological innovations into routine clinical care. If there are time and resources ring-fenced, clinical digital champions can support their frontline colleagues and guide them through the implementation. By embedding codesign principles within transformation programmes, digital champions can easily explain the benefits of digital and technology solutions whilst engaging others in design and implementation. This approach increases the wider acceptance by members of the team. For example, if you are rolling out a digital solution that defines and measures clinical competencies for a patient pathway, designing with the right clinicians will increase likelihood of adoption.

#### **Recommendation 2**

Harness and legitimise the staff with an "innovation mindset" who see opportunities for challenging the status quo and have the passion to drive innovation for patient and staff benefit. These internal innovators should be celebrated as pioneers and encourage wider digital champions across team.

### Demand for flexible working

It was reported that many clinicians are choosing to leave the profession or feeling forced to join bank or agency work to regain some autonomy over their working lives. Between June 2021 and June 2022, the NHS saw a 25 per cent increase in the number of nurses leaving their role. That equates to 7,000 additional nurses leaving the NHS.<sup>4</sup>

In order to boost staff retention, organisations are seeking ways to become an employer of choice and reduce the pressure felt by many frontline professionals through solutions such as digital staffing banks and self-rostering platforms which can provide job flexibility. This enables clinicians to retain their permanent NHS positions whilst also being able to easily access opportunities to work extra shifts like the flexibility afforded to locum and agency staff.

#### **Recommendation 3**

NHS providers should maximise the opportunities that digital solutions provide to increase staff retention and attract clinicians by providing more flexibility of work patterns, overtime etc through the use of technology.

 $<sup>^{\</sup>rm 4}$  King's Fund (2022) The NHS nursing workforce - have the floodgates opened?

## Adoption challenges of embedding digital workforce solutions

## NHS bureaucracy slows down or drives innovations away

Even when NHS commissioners and providers are interested in commissioning digital solutions, the bureaucracy of NHS procurement procedures are seen as major deterrents for companies. The rapid roll-out of the COVID-19 vaccine and the use of the NHS app has demonstrated that the NHS has the potential to adopt at a pace not previously considered possible. We need to learn from these lessons and the government recently announced they are building on the Vaccine Taskforce model to harness world-leading research expertise and remove unnecessary bureaucracy to support the Life Science Vision for the UK. The government recently announced they are building on the Vaccine Taskforce model to harness world-leading research expertise and remove unnecessary bureaucracy to support the Life Sciences Vision for the UK.<sup>5</sup> If a digital solution is validated and demonstrates impact, it should be fast tracked for adoption at a wider scale.

#### **Recommendation 4**

Standardise and streamline the procurement process for commissioning digital solutions, to enable wider adoption at ICS level rather than in the piecemeal way that currently exists. Both NHS organisations and innovators should have the flexibility to enable faster and wider roll-out.

<sup>&</sup>lt;sup>5</sup> https://www.gov.uk/government/news/government-to-use-vaccine-taskforce-model-to-tackle-health-challenges

#### Cashable benefits and efficiency savings

As with many innovations it is difficult to demonstrate in-year cash releasing savings for digital workforce solutions. However, companies need to better understand and address priorities and challenges for NHS organisations. Often, companies prioritise spending their resources on the integration of their digital and technology solutions with existing IT systems rather than building the business case for demonstrating how their innovation creates savings and prioritising time and resources to understand the financial challenges facing the NHS.

Sometimes demonstrating savings robustly can be challenging for workforce solutions compared to other digital and technology solutions adopted within clinical care. Companies should frame their business cases for digital workforce solutions around quantifiable benefits: for example, detailing how their solution saves x minutes of nursing time or how a health and wellbeing solution reduces sickness or retention rates by x per cent. Many digital innovations will generate workforce efficiencies but often these results are not clearly articulated or evidenced.

#### **Recommendation 5**

Companies need to identify and understand the financial pressures of NHS organisations and articulate better how their workforce solution will deliver efficiency savings.

## Interoperability with existing electronic staffing systems

Minimal progress has been made on interoperability with NHS workforce systems such as the Electronic Staff Record (ESR) compared to the integration of electronic patient records. Lack of interoperability is a major hindrance when software suppliers are not providing the necessary application programming interface (APIs). For example, if competencies are not recorded in a staff member's electronic record this could create additional bureaucracy for that staff member. Some suppliers demand significant reimbursement to open their APIs, making interoperability unrealistic.

#### **Recommendation 6**

NHS stakeholders and national policy makers at NHS England / NHS Digital should ensure that the systems such as ESR have open APIs. For example, the procurement of the replacement for the Electronic Staff Record should detail open APIs as a requirement in the specification.

#### **Digital literacy**

Health Education England's evidence<sup>6</sup> suggests that people who have better digital literacy tend to have more positive attitudes and behaviours when it comes to adopting new technologies. A lack of confidence can prevent use of technology and often staff have difficulty securing time during work to undertake online learning or explore the use of emerging digital workforce solutions. Improving access through flexibility to digital training or onboarding and allowing time for the development and improvement of digital capabilities are all essential to improving digital literacy and ensuring digital inclusion across the NHS workforce.

#### **Recommendation 7**

Digital inclusion and time for digital skills training or onboarding needs to be embedded into rolling out solutions. This should take place alongside involving staff working at all levels in the development and testing of the solution to reduce the risks of failure that are normally associated with adoption of innovation within the NHS. To make solutions accessible for all staff provide bite-size or micro training that is embedded into their everyday work practices rather than taking clinicians away from frontline care.

<sup>&</sup>lt;sup>6</sup> Improving Digital Literacy, Health Education England / Royal College of Nursing

#### **Conclusion**

The adoption of digital workforce solutions within the NHS provides a real opportunity to address some of the workforce challenges facing the NHS in 2023. These innovations should be seen as a core part of the solution rather than as optional way to address the challenges. There needs to be renewed thinking about digital solutions to support, train and provide flexibility for our staff in order that they can continue to provide excellent patient care through the NHS.

### **Appendix**

#### The roundtable discussion was attended by:

Name	Role	Organisation
Adam Igra	Director of Innovation and Incubator	Centre for Innovation, Transformation and Improvement, GSTT
Sara Nelson (chair)	Programme Director	DigitalHealth.London
Ruth Bradbury	Senior NHS Navigator	DigitalHealth.London
Nick Bennett	Co-Founder and Co-CEO	Fika
Dr Amanda McNamee	Senior Mental Fitness Scientist	Fika
Lesley Soden	Programme Director - Innovation	Health Innovation Network

Lavinia Pamparau	Project Manager - Innovation	Health Innovation Network
Louise Brennan	Head of Service - Graduates into Health	Health Innovation Network
Dr Agatha Nortley-Meshe	Regional Medical Director for Primary Care (London)	NHSE
Roseanna Cawthorne	Innovation Adoption Education Programme Lead	NHSE IRLS
Steve Tolan	Allied Health Professions Lead	NHS England - London Region
Dr Anas Nader	CEO and Co-Founder	Patchwork
Tiba Rao	Director of Innovation and Co-Founder	Solar Beyond
Lorissa Page	Programme Director - Workforce, OD and HR, SWL ICB	SWL ICB

Jonathan Knight	CEO	Tefogo (Compassly)