

Maxine Guymer 2241348

Management, Organisational Behaviour and Digital Change

Module Number: BMHP4024

9th May 2025

Technology is transforming the way health and social care services are delivered in the UK. From improving communication between professionals to making it easier for patients to access care, digital tools are changing the way teams work together. This digital shift supports faster decision-making, safer treatments, and more efficient care. In this project, we explore how technology supports teamwork in health and social care, looking at both the benefits and the challenges. We'll highlight real examples, such as the use of electronic patient records, AI in diagnostics, and online systems for booking appointments. We will also reflect on issues like cybersecurity and the digital divide, especially for older patients. This project shows how technology is helping health and care professionals provide better care and what needs to be done to keep improving.

In the UK health and social care sector, technology is having a powerful impact on the way services are delivered. It is driving a major shift in how healthcare professionals work together and provide care to patients. By using technology to support health and care professionals in communicating more effectively and to help people get the care they need quickly, easily, and at a time that works for them (NHS England). The online platform, **E-learning in the health and social care sector** helps workers learn new skills, follow the latest guidelines, and stay up to date with their training. E-learning is useful because it can be done anytime and anywhere, (Meaney et al, 2013), eLearning has evolved into a powerful tool for delivering educational materials, interactive sessions, and virtual training for healthcare professionals. With the widespread availability of technology and internet access, eLearning has become more accessible than ever before (Murphy et al 2022). It has revolutionized the way healthcare professionals engage with and access educational content. eLearning enables learners to personalize their learning experiences, adapting to their unique preferences and learning styles. This is great for busy care staff. It covers important topics like infection control, safeguarding, and good communication. This type of learning helps improve the quality of care and keeps everyone safe.

This digital transformation is improving communication, making it easier for staff to share important information quickly and accurately. As a result, teams across the health sector can work more efficiently, respond to patient needs faster, and make better-informed decisions. GP practices and health care providers have the use of the online platform to store patients records this helps share patient information securely between all healthcare providers and this helps individuals work together more quickly and effectively. According to *The Times* (2018), a new robotic system used in pharmacies and hospitals helps make drug dispensing safer and more efficient by reducing errors and saving staff time. AI and robotics are transforming how surgeries are performed in the NHS. According to Haidegger and Kang, these technologies are improving the way operating rooms work. They believe that machines will help reduce the time patients spend in surgery, improve long-term outcomes, and save the NHS money. Metcalfe (2023) also noted that robotic systems make it easier for surgeons to carry out complex procedures, helping them work more accurately. electronic patient records that doctors can access instantly, and systems that speed up how information is shared across the whole organisation, the digital revolution is transforming our healthcare in many smart and innovative (Ways.Horton, T et al. 2024). Many healthcare professionals point out that using technology in these ways can save staff time, boost NHS productivity, reduce clinical risks and lower costs. The use of technology has transformed GP practices and the way NHS patients receive care. It has changed how millions of healthcare professionals interact with patients, making communication and access to services more efficient. This has helped patients create appointments booking online and ordering of repeat prescriptions. Not everyone finds the service they offer great; A survey suggests that older people are finding it difficult to access GP services and feel left behind by the growing use of digital systems. Three out of four said they or a close family member had struggled to book a face-to-face appointment in the past year. (Geissler 2023). The NHS is improving diagnostic technologies and tools for predicting disease, which are important developments in both medicine and public health. For instance, NHS (2023) announced a £21 million investment to introduce AI diagnostic tools across 64 trusts in England, aiming to deliver faster and more accurate results than human clinicians (UK Government 2023). Research from MIT also suggests that, when trained with high-quality data, AI algorithms can analyse brain scans and other 3D images up to 1,000 times faster than humans. (Matheson, R. 2018). In the NHS, protected health information (PHI) includes things like DNA samples, fingerprint scans, digital files, and patient records. This kind of data comes in many forms, which makes it harder to keep safe. There are many challenges when introducing new and emerging technologies in

healthcare. These can include issues like data and cybersecurity, problems with different systems working together interoperability, concerns about patient privacy, meeting legal and regulatory requirements, and making sure new technologies are properly tested and safe for clinical use. Author manuscript; (2023), Because the NHS holds so much valuable patient information, it is a common target for cyberattacks. many hospitals and healthcare providers in the UK don't have the money or expert knowledge needed to protect their systems from serious cyber threats. Unlike large private companies, they often can't afford the latest security technology or specialist staff. This means patient data isn't always as safe as it should be. There are several risks to keeping NHS patient data safe. One major issue is outdated computer systems, which are easier for hackers to attack. NHS England (2020) Many staff members also don't receive enough training to spot cyber threats like phishing emails. Weak or reused passwords can make it easier for cybercriminals to get into secure systems. Limited funding means that not all NHS services can afford the latest security tools or expert IT support. Human error is another big risk, such as accidentally sending patient information to the wrong person. The NHS is also often targeted by cyberattacks like viruses; poor data sharing practices can lead to patient information being shared without the right protection in place. (C Brook 2023).

Technology is having a major impact on teamwork and service delivery in the UK health and social care sector. It has improved communication, made patient information more accessible, and allowed professionals to work together more efficiently. Tools like electronic patient records, AI diagnostics, and robotic systems in surgery are helping staff save time, reduce errors, and deliver better care. However, while the benefits are clear, there are also challenges to address especially around patient privacy, cybersecurity, and making sure everyone, including older people, can access services fairly. As digital systems continue to grow, it's important for the NHS to invest in training, security, and support so that technology can truly benefit all patients and professionals. Overall, when used safely and effectively, technology plays a powerful role in supporting teamwork and improving health outcomes in today's care settings.

Reference list

Brook, Chris. "Healthcare Data Security: Challenges & Solutions."

[Wwww.digitalguardian.com](http://www.digitalguardian.com), 14 June 2023, www.digitalguardian.com/blog/healthcare-data-security.

ENGKAND, NHS. "About the Data Security Centre." *NHS Digital*, 29 Apr. 2020, digital.nhs.uk/cyber-and-data-security/about-us.

Geissler, Hanna. "Older Patients Increasingly Face Digital Barriers to See GP."

Express.co.uk, 12 Nov. 2023, www.express.co.uk/life-style/health/1834213/GP-appointment-nhs-digital-barrier.

GOV.UK. "AI to Speed up Lung Cancer Diagnosis Deployed in NHS Hospitals." *GOV.UK*, 30 Oct. 2023, www.gov.uk/government/news/ai-to-speed-up-lung-cancer-diagnosis-deployed-in-nhs-hospitals.

Horton, t. "Can Technology and AI "Save the NHS"? A Look at the Main Party Manifestos."

The Health Foundation, 2023, www.health.org.uk/features-and-opinion/blogs/can-technology-and-ai-save-the-nhs-a-look-at-the-main-party-manifestos.

Matherson, r. "Faster Analysis of Medical Images." *MIT News | Massachusetts Institute of Technology*, 2018, news.mit.edu/2018/faster-analysis-of-medical-images-0618.

Matheson, Rob . *MIT NEWS*. 20 Nov. 2018.

Meaney, Peter A, et al. "Development of Pediatric Acute Care Education (PACE): An Adaptive Electronic Learning (E-Learning) Environment for Healthcare Providers in Tanzania." *Digital Health*, vol. 9, 1 Jan. 2023, <https://doi.org/10.1177/20552076231180471>. Accessed 16 Sept. 2023.

Metcalf, Charlie. "Robot Surgeons Provide Many Benefits, but How Autonomous Should They Be?" *The Guardian*, 18 June 2023, www.theguardian.com/science/2023/jun/18/robot-surgeons-provide-many-benefits-but-how-autonomous-should-they-be.

National Research Council (US) Committee on Maintaining Privacy and Security in Health Care Applications of the National Information Infrastructure. *Privacy and Security Concerns Regarding Electronic Health Information*. [Wwww.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov), National Academies Press (US), 1997, www.ncbi.nlm.nih.gov/books/NBK233428/.

NHS. “NHS England» Digital Primary Care.” [Wwww.england.nhs.uk](http://www.england.nhs.uk),