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BSc (Hons) Health and Social Care



Digital Transformation in the Health and Care Professions

Component 1: Report

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1 Introduction

In the United Kingdom, the process of digitisation of health and social care has accelerated over the past decade due to the NHS Long Term Plan and growing interest in technologies-driven care. The online innovations, such as e-Patients records, telehealth, and AI-oriented assisting systems, have changed the manner, in which the planning, execution, and management of things are arranged, in relation to the services provided. In such ways, the efficiency will be led to an optimal level to decrease pressure on resources and better patient outcomes with the creation of more connected and data-driven care networks. Telehealth, the use of digital communication technologies to offer remote consultations and monitoring is one of these new innovations, which have gained great momentum such as the way it changed the world during the COVID-19 pandemic. Its implementation has reorganised the character of relationships between clinicians and patients as well as the care delivery model at community levels. In this report, the effects of telehealth on workforce and service delivery in UK health and social care sector are critically assessed. It will discuss the ways in which this digital innovation has changed the nature of jobs, skills, and normal practices and implications of change to quality, access, and efficiency of care delivery. It will evaluate the benefits as well as the pitfalls and present the approaches to assess the sustainable digital transformation within health and social care in a larger context.

2 Overview of the Digital Innovation

Telehealth is the provision of health services to patients by using digital communication tools, which allow clinicians and patients to have remote consultation, diagnosis, monitoring and follow-up (Suresh et al., 2021). It consists of typical operations at secure video conferencing levels, mobile health applications, and remotely observing devices that send patient data live. Practically, telehealth can promote virtual appointments, chronic disease management, home-based care and eliminate the personal visits. However, Bitar and Alismail (2021) observed that during the COVID-19 pandemic, telehealth has become an aggressive trend in the UK, where most of the limitations required remote access to healthcare within NHS Trusts, community health services, and the private sector. Such systems like NHS Attend Anywhere, and GP video consultations were quickly picked up to ensure continuity of care. The essential argument behind adopting telehealth has been efficiency and workforce shortages and accessibility, especially among rural and underserved patients (Surdu et al., 2025). It also promotes the safety of patients by reducing the risk of infection and help clinicians to address higher caseloads due to flexible digital interactions. Telehealth supports national policies like the NHS Long Term Plan (2019), the NHS Digital Transformation Strategy, and both emphasise the use of technology to support care,

modernise services, and enhance patients to have a more resilient and more data-driven healthcare industry (Stoumpos, Kitsios and Talias, 2023).

3 Impact on the Workforce

3.1 Role Changes and Skill Requirements

The advent of telehealth has redefined the position, as well as the role of healthcare professionals in the UK. The dissolving of traditional adoption with digital skills and competences has changed the face-to-face clinical interaction model (Kristin Jonasdottir, Thordardottir and Jonsdottir, 2022). The relevance of digital literacy and technical competence hold an increased degree of importance among nurses, general practitioners, and allied health professionals that should learn to navigate the telework setting and focus on electronic patient records and data interpretation provided by remote monitoring technologies. It has led to the new hybrid jobs, such as a digital nurse or a virtual care coordinator, in which experts incorporate medical care with management of digital systems (Antonacci et al., 2023). Digital capabilities models of NHS Digital Academy and Health Education England have been instrumental in developing improved versions of such upskilling. However, it also turned professional identity into a complicated one, as not requiring touch with the patients so much, but with online relationships. The requirement has included continued professional growth (CPD) to keep up the confidence and ability to offer care remotely (Byungura et al., 2022). Telehealth has therefore reversed the paradigm of care delivery where besides treating, the health professional needs to navigate through technological platforms and still maintain empathy and patient-centred communication mechanism in virtual settings.

3.2 Workforce Competency and Collaboration

The change to the telehealth technology has demonstrated several barriers and enablers across the health and care work force. Early-stage resistance could be seen to be because of lack of confidence, perceived workload increment, and technical training (Kong et al., 2025). Numerous clinicians also raised views regarding the dependability of virtual assessment, and the risk of depersonalisation of care. However, Deni Handani (2024) explored that effective leadership, systematic training and organisational cultures that support adaptation have played the key role as enablement facilitation factors in digital adaptation. Insights Training programmes, including the NHS Digital Ready Workforce or the “Digital Ready Workforce Toolkit kit of training materials, have offered staff collateral on training and on adapting into a technologically expressed role (Mitchell, 2022). Regarding collaboration, telehealth has created enhanced interprofessional communication through allowing real-time data sets sharing and

multidisciplinary virtual meeting experiences that enhance more interprofessional approaches to managing patients. To illustrate, remote surveillance in community well-being has permitted customary nurses, physiotherapists, and general practitioners to work together more amicably in the control of chronic diseases like diabetes or heart failure. However, even with the digital silo, there may arise instances where interoperability among the platforms is in lack. Thus, even though telehealth has increased collaborative potential it also requires integrated digital systems and sustaining professional expertise in the maintenance of effectiveness and collaboration across the borders of care.

3.3 Workforce Outcomes

Telehealth has negatively affected the UK health and social care system through the 2 positive workforce outputs. Regarding its beneficial effects, the digital tools have reduced the burden in administration, speed of traveling, and no consultations. Patient data is now readily available to clinicians to make faster decisions and increase caseloads in more streamlined service delivery (Harbi et al., 2024). Employees also indicate being more flexible and freer to handle their workloads, especially with remote consultations where flexibility is accorded in terms of scheduling. As an example, the review of virtual wards conducted by NHS England revealed the improved productivity of the staff and less hospitalisation. Nevertheless, along with such advantages, new challenges emerge. Cases of technostress because of the omnipresence, malfunctions in the system, and the deluge of information has been vastly reported among medical workers (Wynen, Boon and Dries Van Doninck, 2025). Perceived professional autonomy also can be reduced through heightened surveillance using digital means, like tracking of its performance using telehealth-based tools. Moreover, digital differences among employees may lead to tension and inequality within the groups. The British Medical Association (BMA, 2022) underlined the fact that almost forty per cent of physicians believed that they felt poorly prepared to provide on-line care (Tonkin, 2020).

4 Impact on Service Delivery

4.1 Transformation of Care Processes

Telehealth has been fundamental in influencing the way healthcare is home based in delivery, coordinating as well as managing these services in the UK (Morelli et al., 2024). Everyday routines have no longer been characterised by face-to-face interactions as they are now digitally mediated to provide clinical care outside the conventional clinical environments. Clinicians can conduct remote consultations, diagnosing, assessing, and monitoring the patients,

which increases the level of accessibility of patients who may not normally feel safe because of their geographical or mobility factors (Walthall et al., 2022). This online delivery process simplified the reservation process and minimised the waiting line because health care specialists are free to see their patients flex attendance-wise and more productively. Proceeding further, the incorporation of interpretive telehealth technologies between providers will improve the coordination and continuity of care, especially among individuals with chronic conditions that necessitate multi-disciplinary contributions. Incidentally, remote patient monitoring technologies can be used, which allow constant monitoring of vital signs to inform clinicians about potential evidence of worsening in time and administer necessary interventions (Areia et al., 2021). Furthermore, the process of administration including documenting diseases of the patient and order prescription has been more automated and this allows the reduction of staff human labour, and more time can be directed towards the one-on-one clinical judgement. Alongside these changes, it has created a model of healthcare delivery that is more responsive, interconnected, and proactive, and are complying with the NHS vision of digital-first, integrated approaches of care delivery.

4.2 Quality, Safety, and Efficiency

Telehealth implementation has resulted in significant changes in service quality, safety and efficiency of healthcare. Regarding quality, telehealth becomes possible to do more frequent follow-ups, engage with patients effectively in real time used to increase the adherence to a treatment plan and better outcomes in terms of clinical practices. Virtual consultations minimise cancelled appointments and are faster and more convenient to reach the expertise of a specialist, which can be diagnosed and intervened upon earlier (Campbell, 2023). National Institute of health and care excellence (NICE) have acknowledged telemonitoring as an effective method to prevent hospital readmission especially in the context of patients with the chronic illnesses like chronic obstructive pulmonary disease (COPD) and heart failure. Safety wise, remote care eliminates the possibility of spreading an infection, which became essential at a time when the COVID-19 pandemic was up and running (Filip et al., 2022). The benefits of efficiency can be observed in the time saved in disposing of waiting time, clinical resource use and hospitals bed occupancy. Digital dashboards and analytics help clinicians to support data-driven analysis with the help of digital dashboards and analytics, preventing resources from being allocated to areas mismatched with their performance patterns (Rahman, 2025). The aspects being put into practice such as virtual wards have shown objective cuts in emergency ward admissions, as well as enhancement of patient flows within the NHS Trusts. On the whole, telehealth has empowered the operational

resilience of service delivery thereby ensuring continuity of care even when the demand or disturbance is high.

4.3 Challenges and Inequalities

Telehealth has presented emerging issues that impact on equity and sustainability of service provision despite its benefits. Among them is the problem of digital exclusion, namely, people with no access to the internet, those who are not digitally literate or do not have the necessary devices, cannot enjoy remote healthcare (Nguyen, 2020). This problem has a disproportionate number of patients with high ages, lower socioeconomic status, and patients in rural communities with a weak infrastructure of broadband. Such inequalities are treacherous to the extent that they might widen health inequalities, demeaning the inclusive culture of the NHS. Services reliability and patient confidentiality are also threatened by technical failures, system downtimes, and cybersecurity threats (Bhatt, 2025). Similarly, telehealth is more efficient, yet such practice can unintentionally depersonalise a patient who might require face-to-face communication to feel confident of their emotions or be assessed with the help of the human factor. Substandard service provision is a biannual discovery witnessed across NHS Trusts because of regional gaps in telehealth, and infrastructures as well as workforce preparedness due to uneven distribution of available outreach modalities, as exemplified by unified frameworks of implementation (Gao et al., 2022). In addition, an abrupt digital system, lacking adequate training of the user, can cause disruptions in the working process and additional load to the administration. To mitigate these, national policies may consider digital inclusion activities as a priority, strengthen data protection activities, and even ensure that telehealth complements conventional patterns of care rather than substituting it.

5 Critical Discussion and Synthesis

The telehealth analysis of the UK health and social care suggests that two concepts, namely technological advancement and human flexibility, and societal change are two concepts that cannot be divided. Vazaru and Bocean (2024) argue that digital innovation has enhanced operational efficiency and access to care, and its success necessarily involves the capacity of the workforce to evolve and the system to bring the technological use into the service models. Digital transformation is however not technical only but a social process and requires cultural readiness, and leadership support, or alignment of technology design with professional practice (Imran et al., 2021). The global evidence can be related to the UK practice, such as in Australia with the telehealth expansion or in Sweden with the digital primary care, where in either case, workforce empowerment and patient-centred design is significant to reach the sustainable incorporation.

Systemic benefits i.e., the improved coordination and reduced inefficiencies, hinge on continual support of the capability in digital technologies and the fair infrastructure (Hendra and Margaretha Hanita, 2025). Hence, digital health innovation, in general, is a matter of finding balance between technology and human capability and institutional adjustability. Non-technology drivers do not wholly pursue a transformational digital ecosystem in health and social care but how individuals and systems interact to complement one another.

6 Conclusion

The telehealth analysis clarifies the magnitude at which digital transformation has eluded the workforce and the delivery service of the healthcare and social care of the UK. It has also enhanced efficiency in the processes, accessibility, and modernised harmony parameters in care but also has brought new pressures due to technostress, digital disparities and unbalanced labour preparedness. Although telehealth demonstrates the dynamism and substantiation of care data possibilities, its finances possibilities to survive in the long-term perspective will be determined by the capacity to sustain the human and structural sides of change. The policy makers should address investments in digital inclusion schemes, uniformity in the distribution of infrastructural opportunities within the country and include imparting digital skills to be part of the professional development programs. At an organisational level, medical professionals should introduce the culture of appropriateness and provide psychosocial interventions to avert technology-induced sentiments of deprivation. Such trade-off that associates technology innovation can be scaled in determining the welfare of the workforce and equity of services will be significant in achieving ultimate outcome of digital transformation in UK health sectors and care.

Reference

- Antonacci, G., Benevento, E., Bonavitacola, S., Cannavacciuolo, L., Foglia, E., Fusi, G., Garagiola, E., Ponsiglione, C. and Stefanini, A. (2023). Healthcare professional and manager perceptions on drivers, benefits, and challenges of telemedicine: results from a cross-sectional survey in the Italian NHS. *BMC Health Services Research*, [online] 23(1).
- Areia, C., King, E., Ede, J., Young, L., Tarassenko, L., Watkinson, P. and Vollam, S. (2021). Experiences of current vital signs monitoring practices and views of wearable monitoring: A qualitative study in patients and nurses. *Journal of Advanced Nursing*, [online] 78(3), pp.810–822.
- Bhatt, S.I. (2025). Cybersecurity Risks in Connected Medical Devices: Mitigating Threats to Patient Safety - Repository Universitas Muhammadiyah Sidoarjo. *Umsida.ac.id*. [online]
- Bitar, H. and Alismail, S. (2021). The role of eHealth, telehealth, and telemedicine for chronic disease patients during COVID-19 pandemic: A rapid systematic review. *DIGITAL HEALTH*, 7(2), p.205520762110093.
- Byungura, J.C., Nyiringango, G., Fors, U., Forsberg, E. and Tumusiime, D.K. (2022). Online learning for continuous professional development of healthcare workers: an exploratory study on perceptions of healthcare managers in Rwanda. *BMC Medical Education*, 22(1).
- Campbell, K. (2023). The Impact of Virtual Consultations on the Quality of Primary Care: Systematic Review. *Journal of Medical Internet Research*, 25, pp.e48920–e48920.
- Deni Handani (2024). Organizational Culture Change and Adaptation in the Face of Digital Transformation: A Study of Jambi's Banking Sector. *Enigma in Economics*, [online] 2(2), pp.110–121.
- Filip, R., Puscaselu, R.G., Anchidin-Norocel, L., Dimian, M. and Savage, W.K. (2022). Global Challenges to Public Health Care Systems during the COVID-19 Pandemic: a Review of Pandemic Measures and Problems. *Journal of Personalized Medicine*, [online] 12(8), p.1295.
- Gao, J., Fan, C., Chen, B., Fan, Z., Li, L., Wang, L., Ma, Q., He, X., Zhai, Y. and Zhao, J. (2022). Telemedicine Is Becoming an Increasingly Popular Way to Resolve the Unequal Distribution of Healthcare Resources: Evidence From China. *Frontiers in Public Health*, [online] 10, p.916303.
- Harbi, S.A., Aljohani, B., Elmasry, L., Baldovino, F.L., Raviz, K.B., Altowairqi, L. and Alshlowi, S.

- (2024). Streamlining patient flow and enhancing operational efficiency through case management implementation. *British Medical Journal Open Quality*, [online] 13(1), pp.1–18.
- Hendra and Margaretha Hanita (2025). Digital Transformation in Healthcare Services: the Role of Telemedicine, Telerehabilitation, and Organizational Resilience. *International Journal of Integrative Sciences*, [online] 4(3), pp.533–556.
- Imran, F., Shahzad, K., Butt, A. and Kantola, J. (2021). Digital Transformation of Industrial organizations: toward an Integrated Framework. *Journal of Change Management*, [online] 21(4), pp.1–29.
- Kong, J., Wang, H., Jia, D., Wang, Q., Cheng, J., Wang, R., Zhang, C., Liu, L. and Zhang, Z. (2025). The Experiences of Critical Care Nurses and Physicians Implementing Early Active Mobilisation on Patients With Mechanical Ventilation: A Qualitative Study. *Nursing in Critical Care*, 30(5).
- Kristin Jonasdottir, S., Thordardottir, I. and Jonsdottir, T. (2022). Health professionals' perspective towards challenges and opportunities of telehealth service provision: A scoping review. *International Journal of Medical Informatics*, 167, p.104862.
- Mitchell, P. (2022). Harnessing digital technologies for workforce development, education and training: an overview. *British Journal of Healthcare Assistants*, 16(12), pp.577–583.
- Morelli, S., Daniele, C., D'Avenio, G., Grigioni, M. and Giansanti, D. (2024). Optimizing Telehealth: Leveraging Key Performance Indicators for Enhanced TeleHealth and Digital Healthcare Outcomes (Telemechron Study). *Healthcare*, [online] 12(13), pp.13–19.
- Nguyen, A. (2020). Digital Inclusion. *Handbook of Social Inclusion*, pp.1–15.
- Rahman, M.M. (2025). Data Analytics for Strategic Business Development: A Systematic Review Analyzing Its Role in Informing Decisions, Optimizing Processes, And Driving Growth. *Journal of Sustainable Development and Policy*, 01(01), pp.285–314.
- Stoumpos, A.I., Kitsios, F. and Talias, M.A. (2023). Digital Transformation in healthcare: Technology Acceptance and Its Applications. *International Journal of Environmental Research and Public Health*, [online] 20(4). Available at: <https://www.mdpi.com/1660-4601/20/4/3407>.
- Surdu, A., Ilie, F.C., Luchian, I., Trifan, D., Budala, D.G., Monica, S.M., Ciupilan, C., Puha, B. and Tatarciuc, D. (2025). Telemedicine and Digital Tools in Dentistry: Enhancing Diagnosis

- and Remote Patient Care. *Medicina*, [online] 61(5), p.826.
- Suresh, D., Chaudhari, S., Saxena, A. and Gupta, P.K. (2021). Telemedicine and Telehealth: The Current Update. *Health Information Science*, pp.67–82.
- Tonkin, T. (2020). *Stress on doctors reaches all-time high*. [online] The British Medical Association is the trade union and professional body for doctors in the UK. Available at: <https://www.bma.org.uk/news-and-opinion/stress-on-doctors-reaches-all-time-high>.
- Vărzaru, A.A. and Bocean, C.G. (2024). Digital Transformation and Innovation: The Influence of Digital Technologies on Turnover from Innovation Activities and Types of Innovation. *Systems*, [online] 12(9), p.359.
- Walthall, H., Schutz, S., Snowball, J., Vagner, R., Fernandez, N. and Bartram, E. (2022). Patients' and clinicians' experiences of remote consultation? A narrative synthesis. *Journal of Advanced Nursing*, 78(7).
- Wynen, J., Boon, J. and Dries Van Doninck (2025). Information-sharing in a turbulent Public sector: is more always better? Exploring information overload among civil servants during complex workplace changes. *Public Management Review*, pp.1–28.