

Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Digital health systems and the care and autonomy of older adults in the UK

Module name: Introduction to Independent Research Skills

Module code: BMHP5019

Student name: Ntombizodwa Ndlovu

Student ID: 2332329

Word count: 3600

Table of Contents

ABSTRACT	3
1. INTRODUCTION	4
DEFINITION OF MAIN CONCEPTS	4
RATIONALE OF THE RESEARCH.....	4
2. BACKGROUND.....	4
3. METHODS	5
3.1 RESEARCH PHILOSOPHY AND STRATEGY	5
3.2 RESEARCH DESIGN.....	6
3.2.2 DATA COLLECTION PROCESS.....	6
3.3 DATA ANALYSIS	6
3.5 ETHICAL CONSIDERATIONS	6
4. RESULTS	7
4.1. RESEARCH SOURCE: ZUO <i>ET AL.</i> (2021).....	7
4.2. RESEARCH SOURCE: FARRE (2023).....	8
4.3. RESEARCH SOURCE: ALEX GARNER ¹ , <i>ET AL.</i> (2024).....	8
4.4 RESEARCH SOURCE: BELTRÁN <i>ET AL.</i> , 2025	8
4.5 RESEARCH SOURCE: OMOTARA FAGBUYI, (2025).	8
5. DISCUSSION.....	9
6. CONCLUSION AND RECOMMENDATIONS.....	11
REFERENCES	12

Abstract

In this paper, the authors have concentrated on the effect of digital health systems on the care and independence of the older population in the UK. With the population aging, digital health technologies containing electronic health records (EHRs), telemedicine, wearables, and mobile health apps; they offer a chance to improve care delivery and efficiency and enable people to manage themselves and their health. The research question is the way that we can use these systems to reduce the health care load by providing more effective care of the elderly people, making them more independent. However, the aspects related to digital literacy, access, and the privacy issue obstacle the spread of digital health solutions among older adults. The paper describes the interventions implemented in the UK healthcare sector to address these concerns, such as digital health literacy, and the NHS app, and explains how the mentioned problems could be used to make access more accessible. The study proves that digital health systems must be more inclusive and user-friendly to make sure that all older adults with access to digital devices can use it, particularly in underrepresented and remote populations. Finally, the study concludes that although the digital health technologies can produce a positive impact on the care and autonomy of the older adults on a radical scale, the most personalised and culturally sensitive approach should be adopted to overcome the existing barriers and give everyone an equal opportunity.

1. Introduction

Definition of main concepts

Digital health systems can be defined as the utilisation of digital technologies to enhance the quality, efficiency, and availability of healthcare, including electronic health records (EHRs), telemedicine, wearables, and mobile health apps (Giansanti, 2025). These technologies allow healthcare workers to monitor patients remotely and manage their records electronically. This provides real-time communication between patients and other professionals. In healthcare, autonomy is defined as the empowerment of persons to make informed choices regarding their health and well-being, usually with technological assistance to obtain information and knowledge to inform decisions (Akhtar, Bhatti and Fredericks, 2025).

Rationale of the research

The population projections indicated by the ONS 2022 will have a severe impact on the healthcare and social care sector due to the ageing population of the UK. The concluded demand of 1.7 million of pension age (65+) and the almost twice growth of individuals aged 85 and above by 2047 will likely burden current healthcare facilities (ons.gov, 2025). The changing in demographics is in line with increasing issues of increasing care needs among the elderly population. Through research, it has been found that 1.5 million individuals aged 65 and above are living without care needs met, specifically long-term conditions, and it is likely to increase as the population grows older (Age UK, 2019). Digital health technology can help overcome these problems and offer cost-effective, efficient, and solutions to care (Gomis et al., 2024). Through the interventions of remote monitoring, telemedicine, and digital health records, the process of care for older adults could be streamlined, which lowers hospital admissions and improves independence (Liu et al., 2024). Also, digital systems offer an opportunity to extend care outside of traditional environments and provide the elderly population with autonomy and access to timely interventions without overloading the healthcare system.

Review question

How do digital health systems impact the care and autonomy of older adults?

Research Objectives

To understand the impact of digital health systems on improving the quality of care and autonomy of older adults.

To review the challenges faced by the UK healthcare sector in implementing digital health systems for older adults.

To evaluate strategies employed by the UK healthcare system to overcome the barriers to digital health adoption for older adults.

To recommend future trends and developments in digital health systems that could further support the care and autonomy of older adults in the UK.

2. Background

The adoption of digital technologies in the healthcare sector of the UK has received much interest because it promises to enhance the care delivery process, particularly among the elderly. The National Health Service (NHS) Digital in the UK defines digital health systems as electronic health records, telemedicine, wearable devices, and mobile health apps (Parliament.uk, 2023). This can help to make care more accessible, continuous, and patient-centred. Having an ageing population, there is a growing demand for such services. The UK government estimates that the number of individuals aged 65 and above would increase by 41% by the year 2039, and those aged 85 and above would almost double by 2047 (Gov.uk, 2025). This population change brings a large weight on healthcare systems to change and innovate.

The possibilities of digital health to help older adults handle a chronic disease and enhance their quality of life have been the subject of many studies. Digital health tools have been found to potentially cut down on hospital admissions by up to 30% by remotely monitoring chronic diseases like diabetes and hypertension (NHS Digital, 2020). In addition, telemedicine and telehealth have demonstrated potential in providing healthcare services to aged individuals who experience mobility or transport difficulties, especially in rural settings (Gobburi et al., 2025). Nevertheless, these technologies have their own setbacks in the areas of accessibility and digital literacy.

One of the main concerns that the literature raises is the digital divide among the older population, as 4.7 million adults over 65 in the UK cannot use basic digital skills, and 2.3 million do not use the internet at all (Age UK, 2024). These are the obstacles to the complete utilisation of digital health services by most elderly people, ultimately influencing their agency and their access to timely healthcare (Frishammar et al., 2023). Various researchers (Rabbani, Alam and Prybutok, 2025; Merino et al., 2024) have suggested that despite their high promise, the success of digital health solutions in enhancing the care outcomes of older adults is dependent upon inclusive design and the process of overcoming digital inequalities. Digital inclusion is a major priority in policies of the UK, including the Digital Health and Social Care Strategy (Heaslip and Holley, 2023). The plan encourages the creation of efficient digital health tools which can support the unique requirements of elderly people, such that they become reachable, practical, and helpful to those with restricted computer skills. In addition, the NHS Long Term Plan undertakes to incorporate digital health services that enable patients to control their diseases, decrease the rising dependency on

conventional face-to-face interactions, and allow more elderly individuals to live independently (Johns et al., 2023).

Nevertheless, even with policy interventions, low Internet access rates and inaccessibility of digital devices among older people have remained an obstacle to successful adoption. According to studies conducted by Ageuk (2024) and NHS Digital (2020), closing such gaps requires training programs and outreach. Moreover, the use of digital health tools by healthcare workers continues to be a significant issue, with researchers researching that older patients are less likely to use digital health tools as recommended compared to their younger counterparts (Tappen et al., 2022).

The necessity of focused interventions to overcome digital exclusion and provide people with equal opportunities to access healthcare is essential to allow older people to maximise their benefits of the digital health environment and positively impact their health quality and preserve their independence.

3. Methods

In this research, a qualitative research design will be adopted to examine the available literature on the effects of digital health systems on both care and autonomy of the elderly. Its objective is to define knowledge gaps and discuss possible threats and opportunities in implementing digital health technologies in aged care.

3.1 Research Philosophy and Strategy

The current study uses a contextual approach, which is consistent with the individual perspective on the socially constructed and subjective nature of reality. It will review the experiences and perceptions of healthcare providers and older adults on digital health systems. The study is an inductive approach, which involves a systematic literature review to create new knowledge on how digital health technologies are adopted in the UK. Through qualitative data analysis, the research will aim to gain a more insights into the lived experiences of older adults and healthcare professionals concerning digital health, highlighting its advantages and obstacles to its implementation.

3.2 Research Design

In this study, the mono-method research design is used, as the only source of data will be the existing literature (qualitative only). This is a scoping review, of qualitative data which will provide a closer insight into the problems, obstacles, and advantages that digital health interventions entail, particularly when it comes to older adults. The research design is in accordance with describing the complicated social conditions in adoption of technology and its effects on older care. The secondary literature data used as the primary source of data

are peer-reviewed articles, reports, and academic literature published in the past 10 years. These sources were identified through their relevance to the research questions, the British healthcare system, as well as their priority on primary and secondary data. The secondary data would be suitable for this study because it will enable the synthesis of the previous studies of knowledge and the inclusion of a wide viewpoints without the involvement of actual participants.

3.2.2 Data Collection Process

The search was conducted in the electronic bibliographic databases including PubMed, UWTSD Library, and Google Scholar to gain secondary data related to the study. Keywords such as digital health systems, elderly care, old adults, autonomy, health monitoring and the UK healthcare were all used in the search. Several publications (released within the past 10 years) that looked at digital health interventions in elderly care and related indicators of autonomy, self-management, and care outcomes were included as well. All the articles that were picked are peer reviewed to be systematic and organised. Five major studies were incorporated in the synthesis to be further analysed after comprehensive screening.

3.3 Data Analysis

The thematic analysis technique, which is a qualitative approach, was used to review the data collected with this study to identify, review, and report themes in the data. The process of review happened in several steps. In the first stage the researchers oriented herself with the data by reading the chosen studies carefully to be able to contextualize them in their respective contexts as well as understand their discoveries. After that, the initial underlining was conducted through marking the important pieces of data connected to the research question directly, including such aspects as digital illiteracy, privacy concerns, and autonomy. These sets of markings were then further grouped into larger thematic areas such as the adoption of digital health technologies, barriers to adoption, effect on autonomy, and overcome barriers and in this manner a wider order has been achieved. Each of the themes was then put through a strict review. Also, it helps to refine exercise to reach internal consistency and accuracy. The themes were therefore combined into a logical order that answered the general research question and give light on the main issues, advantages, and strategic measures that were relevant to the digital health systems in the aged care sector in the United Kingdom.

The methodology is in line with the aims of a scoping review, which aims at summarising and synthesising the available gap of knowledge and not tracing the changes over time.

3.5 Ethical Considerations

In this research, secondary data is used; the main ethical issues are related to research honesty. The chosen articles were peer-reviewed and, therefore, their compliance to ethical norms in data analysis and collection. Also, the researchers included in this review used informed consent and ethical guidelines in the process of gathering the data of the participants.

4. Results

Article Citation	Aim of Study	Methods, Sample Size, and Characteristics	Summary of Main Findings
Zuo, et al. (2021)	Explore data anonymisation in pervasive healthcare.	Systematic literature mapping: 239 studies grouped for readability.	Outlined important methods of privacy in digital health through anonymisation.
Farre, et al. (2023)	Examine digital technology's role in addressing health inequalities.	Scoping review; UK settings of 11 articles.	Challenged the importance of digital technology in addressing health disparities, particularly in the rural communities.
Alex Garner et al. (2024)	Analyse digital tech's impact on care home admissions and costs.	Longitudinal study; 8702 care homes.	Digital aids decrease unexpected patient admission and additional expenses on care homes.
Beltrán, et al. (2025)	Evaluate outcomes of digital health for older adults in rural areas.	Systematic review; underserved areas.	Showed digital health solutions are promising but have implementation challenges.
Omotara Fagbuyi (2025)	Review policies on digital health literacy for older adults.	Policy brief.	Promoted the increase of digital literacy to enable older adults to have digital health.

Table 4: Data table

4.1. Research source: Zuo et al. (2021)

Theme 1: Data Anonymization for Pervasive Health Care

The scoping review contains some of the most noticeable themes of the anonymization of data in digital health care. The key focus is on giving the balance between the privacy maintenance and use of the data over anonymization disturbs the effective data usage. The privacy models along with the reidentification risk is important in forming an anonymization process and some of the models are studied to understand the effectiveness of different types of data. Legal and ethical aspects, in particular the policies regarding patient consent and data sharing (including GDPR and Data Protection Act), are the key items of the discussion. Also, the review points to the lack of practical and easy to use tools to introduce anonymization into health care, although it identifies more user-friendly tools to make it more usable without reducing privacy.

4.2. Research source: Farre (2023)

Theme 2: Use of digital technology to deliver healthcare services

The scoping review suggests that digital health interventions in the UK are potentially great but have limitations regarding addressing health inequalities. Out of the 11 that were included, only four studies provided data on effectiveness, one of the articles was cost-effective. The focus of interventions was typically on healthcare providers (7 studies) as opposed to service users (2 studies). The key focus of the research has been to improve the capacity of providers, and no direct experience with underserved. Barriers to access by at-risk groups include low digital literacy and high costs, so the integration of co-designed solutions will be required to contribute to reducing the unequal distribution of the benefits of digital health.

4.3. Research source: Alex Garner¹, et al. (2024)

Thematic The impact of digital technology in care homes

In the study of health calls in care homes, it was clear that the number of visits to the emergency department (ED) and hospital admissions had reduced. The Health Call residents had 11 low ED visits and 25 low hospitalization rates when compared to non-Health Call residents. Emergency hospital stay was reduced by 11% with 29 % being reduced monthly. Financially: Health Call led to an estimated decrease of £57 a month in the cost per resident in 2018 and to an increase in 2021 to £113 a month. This demonstrates that digital health interventions, like Health Call are not only contributing to improved health outcomes, but also reducing costs, especially when it comes to improved communication between the staff at the care home and the services offered by the NHS.

4.4 Research source: Beltrán et al., 2025

Theme 3: Digital and Remote Health for Older Adults in Rural/Underserved Settings

The outcome of the systematic review confirms that the digital health interventions can be useful with elderly individuals, who live in the rural areas. The 14 studies comprised a total of 71% of which reported significant healthcare improvements in terms of better control of chronic diseases like diabetes and heart diseases. Additionally, 79 and 56 % of the studies improved behavioural or psychosocial outcomes and reduced hospitalizations or acute events, respectively. However, the most common challenges were digital literacy and lack of appropriate broadband connection especially in rural locations.

4.5 Research source: Omotara Fagbuyi, (2025).

Theme 4: Digital Health Literacy for Older Adults in the UK

The review noted that older adults in the UK only have significant digital health literacy imbalance with 4.7 million adults aged 65 and over lacking basic digital skills and 2.3 million not using the internet. Poor digital confidence, lack of education, distrust of health services are among some of the other factors that stops the use of digital health platforms. All of these were increased by the COVID-19 pandemic, the barriers associated with these are cultural mistrust, fear, and physical disabilities among others. Community-based solutions, non-online access and culturally relevant communication should be taken to reduce the inequalities in health. The impact of government interventions in the UK like NHS App and digital health champions would positively affect the access and activities in digital health.

5. Discussion

Digital Health Systems on Promoting the Quality of Care and Autonomy in old adults

Providing access to digital tools to reduce isolation and improve health of elderly (Lancet, 2023). Digital health systems can significantly enhance the care and independence of elderly individuals by improving disease prevention and offering telehealth monitoring. Beltran et al. (2025) believe that such systems have proved effective in the management of chronic diseases such as type diabetes and heart disease because the cases are constantly monitored. This assists in promoting health outcomes and it enhances autonomy among older adults in that they can take power of their own health. Below figure shows aged between 55- 65 using internet to access healthcare is approach 57-67% (Statista, 2024a)

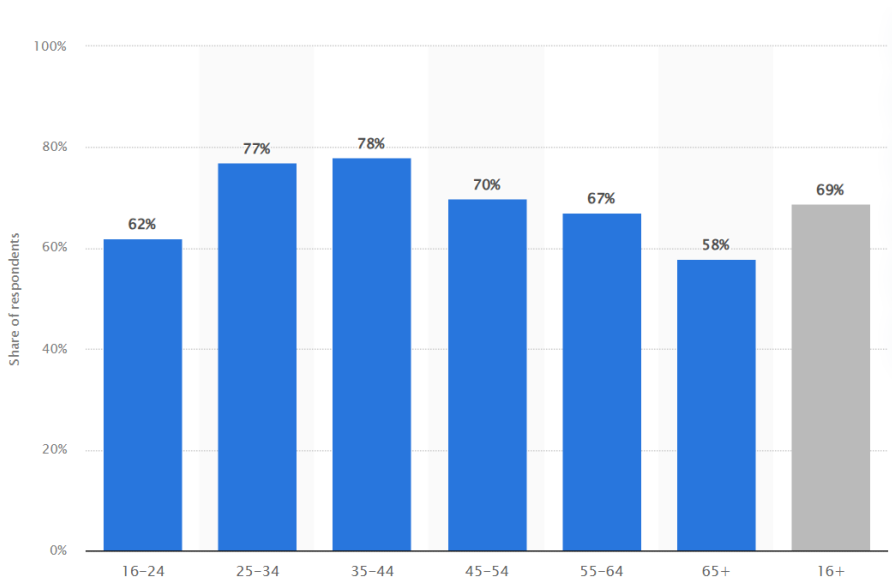


Figure 5: UK: online audience using internet to access healthcare services 2024, by age (Source: Statista, 2024)

Problems that the Healthcare Sector in the UK has been encountering

There are multiple barriers that have prevented the use of digital health systems in the UK particularly among the older adults. Farre (2023) argues that because of a lack of barriers to technology access, such as low digital literacy, high costs, and limited access to technology, older adults are excessively affected. According to Fagbuyi, (2025), in the UK, nearly 4.7million of the people who are aged above 65 and around 2.3 million have never accessed the internet, with most of them being aged above 75. These and additional issues affect the success of digital health systems with older adults because digital literacy gaps are only part of the issue. Age UK warns 2.4 million digitally excluded older people are at risk of being left behind in an increasingly digital world (Age UK, 2025)

UK Healthcare makes use of the following strategies

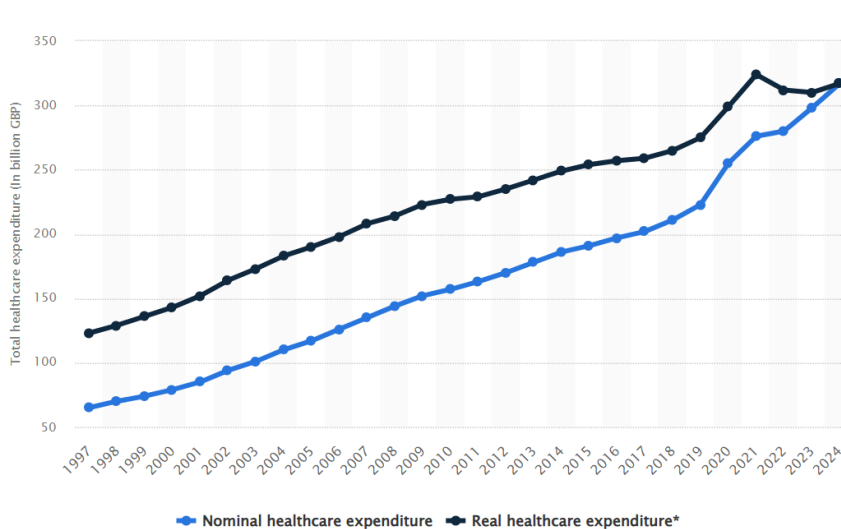


Figure 5: Healthcare expenditure in the UK 1997-2024

(Source: Statista, 2024)

The above figure shows Healthcare spending in the United Kingdom stood at 317 billion British pounds in 2024 (Statista, 2024). The UK has attempted to achieve such challenges by initiating programs such as NHS App and Digital Health Champions (Digital unite, 2023). These initiatives are aimed at enhancing digital engagement and improved health outcomes among elderly people. However, Fagbuyi (2025) reveals that it is significant that other solutions should be more accommodating, and the need to deal with cultural mistrust, a lack of confidence, and generational disparities in technology use should be addressed. Even though the government has achieved certain ground, these interventions must be more tailored to the needs of different groups of people who are disadvantaged.

Implicate Future Trend and Developments

Future health systems are required to be created in such a way that enhances access and inclusivity of the older adults in future. This includes creation of user-friendly systems and addressing problems in the rural areas. Multicomponent models supported by healthcare professionals may improve their adherence and outcomes (Beltran et al., 2025). Besides, culturally diverse messages and community-based activities recommended by Fagbuyi (2025) would be required to overcome the digital exclusion issue and ensure that the intervention would be effective and reach all older adults among them.

Importance in Health and Social Care

Such findings highlight the possibilities of revolution in digital health systems to support the health needs of the aging population. With the rising number of older adults, digital health will reduce the burden on the healthcare system, enhance disease management, and older adults will have to become more independent.

Limitations

The studies reviewed have encouraging findings, but there are small limitations such as small samples, lack of follow-up, and lack of reviewing the cost-effectiveness. These are barrier that may not make it possible to calculate the results and conclude on the sustainability of digital health systems in the future to improve coverage of older adults.

6. Conclusion and Recommendations

Conclusion

This paper emphasises how digital health solutions can enhance independence and care of the elderly in the UK. Digital technologies that can improve the quality of managing chronic conditions, better autonomy, and decrease pressure on healthcare services include

telemedicine, remote monitoring, and mobile health apps. However, significant barriers still exist, including poor digital literacy, lack of technological coverage, and digital inaccessibility of older adults, particularly in disadvantaged population. The paper also notes how equity is important in access to the technologies with the marginalized groups generally being problematic on accessing the digital health interventions. Even though a positive change in health outcomes can be achieved using digital health systems, these issues are crucial to consider ensuring all older adults can benefit. Overall, the evidence suggests that the digital health systems could be a key element of transforming care delivery provided to aging individuals, but the digital divide will need to be overcome to provide success on a greater scale.

Social Care Practice Recommendations

More policies to improve digital literacy among the aging population through a special education should be taken to ensure that as much of the benefits of digital health systems as possible are achieved (Yang and Chen, 2025). The UK government should also invest in closing the digital divide, particularly in the rural as well as the remote regions by enhancing the broadband connection and providing access to cheap gadgets. In addition, healthcare delivery should be in a way that makes digital health intervention user-friendly, culturally competent and affordable to everyone among the aged regardless of their socioeconomic backgrounds.

References

Age UK (2019), The number of older people with some unmet need for care now stands at 1.5 million, Available At:<https://www.ageuk.org.uk/latest-press/articles/2019/november/the-number-of-older-people-with-some-unmet-need-for-care-now-stands-at-1.5-million/> (Accessed On: 20th April 2026)

Age UK (2025). Age UK warns 2.4 million digitally excluded older people. (online) Age UK. Available at: <https://www.ageuk.org.uk/latest-press/articles/age-uk-warns-22.4-million-digitally-excluded-older-people-are-at-risk-of-being-left-behind-in-an-increasingly-digital-world/>. (Accessed: 18th April 2026)

Age UK (2024). More than 1 in 3 over 65s (4.7 million) lack the basic skills to use the internet successfully, Available At:<https://www.ageuk.org.uk/latest-press/articles/2024/more-than-1-in-3-over-65s-4.7-million-lack-the-basic-skills-to-use-the-internet-successfully/>, (Accessed On: 20th April 2026)

Akhtar, M.U., Bhatti, M.E. and Fredericks, S. (2025) "What factors influence patient autonomy in healthcare decision-making? A systematic review of studies from the Global South," *Nursing ethics*, 32(3), pp. 875–891. Available at: <https://doi.org/10.1177/09697330241272794>.

Alex Garner¹, et al. (2024) "The impact of digital technology in care homes on Beltrán, V., Chaple Gil, A., Morales-Gómez, C., Campos-Bijit, V., Contador, R., Díaz, L., Bustos, J. and Fernandez, E. (2025). Digital and Remote Health for Older Adults in Rural/Underserved Settings: Systematic Review of Clinical, Behavioural, and Implementation Outcomes (Preprint). *JMIR Aging*. doi:<https://doi.org/10.2196/78913>.

Digital unite (2023). The Digital Health Champions Network | Digital Unite. [online] Digitalunite.com. Available at: <https://www.digitalunite.com/digital-health-champions-network> (Accessed 28 Apr. 2026).

Farre A, Fang M, Hannah B, et al. (2023) Exploring the use of digital technology to deliver healthcare services with explicit consideration of health inequalities in UK settings: A scoping review. *DIGITAL HEALTH*. 2023;9. doi:[10.1177/20552076231185442](https://doi.org/10.1177/20552076231185442)

Frishammar, J. et al. (2023) "Digital health platforms for the elderly? Key adoption and usage barriers and ways to address them," *Technological forecasting & social change*, 189. Available at: <https://doi.org/10.1016/j.techfore.2023.122319>.

Giansanti, D. (2025) "The Future of Healthcare Is Digital: Unlocking the Potential of Mobile Health and E-Health Solutions," *Healthcare (Basel)*, 13(7), p. 802. Available at: <https://doi.org/10.3390/healthcare13070802>.

Gobburi, R.K. et al. (2025) "Telemedicine use in rural areas of the United Kingdom to improve access to healthcare facilities: A review of current evidence." Available at: <https://doi.org/10.1016/j.infoh.2025.01.003>.

Gomis-Pastor, M. et al. (2024) "Clinical Validation of Digital Healthcare Solutions: State of the Art, Challenges and Opportunities," *Healthcare (Basel)*, 12(11), p. 1057. Available at: <https://doi.org/10.3390/healthcare12111057>.

Gov.uk (2025), 2022-based population projections: a GAD technical bulletin, Available At:<https://www.gov.uk/government/publications/2022-based-population-projections-a-gad-technical-bulletin/2022-based-population-projections-a-gad-technical-bulletin/> (Accessed On: 20th April 2026)

Heaslip, V. and Holley, D. (2023) "Ensuring digital inclusion," Clinics in Integrated Care, 17. Available at: <https://doi.org/10.1016/j.intcar.2023.100141>.

Garner, A., Lewis, J., Dixon, S., Preston, N., Caiado, C. C., Hanratty, B., Jones, M., Knight, J., & Mason, S. M. (2024). The impact of digital technology in care homes on unplanned secondary care usage and associated costs. Age and Ageing, 53(2). <https://doi.org/10.1093/ageing/afae004>.

Johns, G. et al. (2023) "Benefits, challenges and sustainability of digital healthcare for NHS Wales: a qualitative study," BMJ open, 13(5), p. e069371. Available at: <https://doi.org/10.1136/bmjopen-2022-069371>.

Lancet (2023). Digital health equity for older populations. The Lancet Digital Health, 5(7), pp. e395–e395. doi:[https://doi.org/10.1016/s2589-7500\(23\)00114-0](https://doi.org/10.1016/s2589-7500(23)00114-0).

Hu, J. et al. (2024) "Mapping the Evolution of Digital Health Research: Bibliometric Overview of Research Hotspots, Trends, and Collaboration of Publications in JMIR (1999-2024)," Journal of medical Internet research, 26(2), p. e58987. Available at: <https://doi.org/10.2196/58987>.

Liu, J.-C. et al. (2024) "Unveiling the Potential: Remote Monitoring and Telemedicine in Shaping the Future of Heart Failure Management," Life (Basel, Switzerland), 14(8), p. 936. Available at: <https://doi.org/10.3390/life14080936>.

Merino, M. et al. (2024) "Value-based digital health: A systematic literature review of the value elements of digital health care," Digital health, 10, p. 20552076241277438. Available at: <https://doi.org/10.1177/20552076241277438>.

Omotara Fagbuyi (2025). Digital Health Literacy for Older Adults in the UK: A Policy Brief. ResearchGate. [online] doi:<https://doi.org/10.6084/m9.figshare.30917054>.

ons.gov (2025a), National population projections: 2022-based, Available At:<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/population>

nprojections/bulletins/nationalpopulationprojections/2022based?/ (Accessed On: 28th April 2026)

Parliament.uk (2023), Digital transformation in the NHS, Available
At:<https://publications.parliament.uk/pa/cm5803/cmselect/cmhealth/223/report.html/>
(Accessed On: 28th April 2026)

Rabbani, M.G., Alam, A. and Prybutok, V.R., 2025. Telehealth as a Sociotechnical System: A Systems Analysis of Adoption and Efficacy Among Older Adults Post-COVID-19. *Systems*, 13(10), p.843. <https://doi.org/10.3390/systems13100843/>

Statista (2024b). Healthcare expenditure UK (2024) Statista. (online) Statista. Available at: <https://www.statista.com/statistics/317669/healthcare-expenditure-in-the-united-kingdom/?srsltid=AfmBOoo5co2wfioCCW3rhAhfZUGSYuSYoOMKCalu8aTd0QhDg2LZvmYG> (Accessed 28 Apr. 2026)

Tappen, R.M. et al. (2022) "Digital Health Information Disparities in Older Adults: Mixed Methods Study," *Journal of racial and ethnic health disparities*, 9(1), pp. 82–92. Available at: <https://doi.org/10.1007/s40615-020-00931-3>.

Yang, S., Xu, W. and Chen, K. (2025) "Digital literacy and its effects on older adults' health: exploring mechanisms and outcomes," *Frontiers in public health*, 13, p. 1669425. Available at: <https://doi.org/10.3389/fpubh.2025.1669425>.

Zuo, Z et al. (2021) "Data Anonymization for Pervasive Health Care: Systematic Literature Mapping" *Study JMIR Med Inform* 2021;9(10): e29871
URL: <https://medinform.jmir.org/2021/10/e29871>