International Journal of Innovative Technologies in Social Science

e-ISSN: 2544-9435

Operating Publisher
SciFormat Publishing Inc.
ISNI: 0000 0005 1449 8214

2734 17 Avenue SW,
Calgary, Alberta, T3E0A7,
Canada
+15878858911
editorial-office@sciformat.ca

ARTICLE TITLE	AN AGE-OLD PROBLEM IN A HIGH-TECH WORLD: THE DIGITAL HEALTH CARE DIVIDE FOR ELDERLY PATIENTS
DOI	https://doi.org/10.31435/ijitss.1(49).2026.4601
RECEIVED	17 November 2025
ACCEPTED	18 January 2026
PUBLISHED	27 January 2026
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AN AGE-OLD PROBLEM IN A HIGH-TECH WORLD: THE DIGITAL HEALTH CARE DIVIDE FOR ELDERLY PATIENTS

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ABSTRACT

The rapid digitalization of health care, propelled by the COVID-19 pandemic, has led to a rapidly growing gap in use of medical technology for senior patients. The inclusion of wearable medical devices, patient portals, telemedicine, and access to information has created an opportunity for patients to have more control over their health than ever before. However, for elderly patients it also comes with new challenges due to fear or reluctance to use advanced technologies they are not familiar with, leaving them to rely on family members and caregivers. It was found that health care provider's hesitation in offering digital options and the expenses associated with digital devices are another obstacle. There is a significant need for modification in health care personnel attitudes regarding technology, promotion of combining community centers and health care for improving overall quality of life and digital literacy, and advocacy for senior patients' opinions when creating new medical technology and possibly incorporating AI technology to aid in bridging the gap.

KEYWORDS

AI, Healthcare, Geriatric, Elderly Patients, Telemedicine, Retirement Community

CITATION

Zofia Botto, Barbara Reizer, Marzena Swojnóg, Klaudia Krystek, Patrycja Felisiak, Dominika Kowalczyk, Dominika Bieszczad, Magdalena Barczewska, Zofia Śliwa, Dominik Andrzej Ślazyk (2026) An Age-Old Problem in a High-Tech World: The Digital Health Care Divide for Elderly Patients. *International Journal of Innovative Technologies in Social Science*. 1(49). doi: 10.31435/ijitss.1(49).2026.4601

Introduction:

Health care has encountered a rapid shift in how patients access information, communicate with health care personnel, and manage chronic conditions. Yet elderly patients, who form the majority of users of the health care system, are having a difficult time catching up to the rapidly advancing technology. Many older patients face obstacles such as hindered access to medical information, complex device interfaces, difficulty navigating wearable-devices, and limited digital literacy, limiting their ability or decreasing their desire to participate fully in digital health systems.[1,2]

However, the COVID-19 pandemic marked a major turning point with restrictions pressuring for the use of telemedicine which in turn accelerated adoption among older patients. With few options, the rise in use by elderly patients revealed both the potential benefits and usability challenges that are cause for diminished interest.[3] This period highlighted the necessity to design technologies that are simpler, more intuitive, and better aligned with the abilities and preferences of aging users as well as incorporate guidance for the education of use on these novel technologies.[4]

Methodology

This review focused on analysis of current options, struggles as well as possible areas of improvement of digital aspects of healthcare in today's rapidly changing technology for elderly patients, based on articles sourced from Science Direct, PubMed, Google Scholar, Research Gate and authors' observations with elderly care facility. The literature search was executed using the following keywords: telemedicine, elderly patients, digital health, COVID-19.

Findings

Benefits of Advancement in Technology

With access to telemedicine, wearable device sharing, and patient portals the requirement for in-person appointments drops significantly particularly for short specialist follow up appointments or lab result interpretation. The shift allows for simpler and more flexible scheduling and canceling appointments, a larger base of specialists to choose from when travel time and distance is no longer an obstacle, and the option of remaining in the comfort of one's own home instead of long waiting times in uncomfortable waiting rooms,

sometimes even sharing the space with patients that pose a risk of infection particularly during seasonal influenza or even in times of crisis such as during the COVID-19 pandemic.[5,6,7]

In response to ecological movements with the goal to decrease paper waste, medical institutions are decreasing the number of leaflets, pamphlets, and other forms of printed information, instead replacing these sources of information with scannable QR codes that direct users to websites, text, videos or other educational materials which can exponentially exceed the amount of information that can be conveyed by a paper pamphlet. Additionally, information accessed by QR codes can be updated with the newest materials regularly and can have visual or audio options for conveying the same information making access to verified medical information more attainable despite many of the challenges with which elderly patients face due to visual, auditory and neurological impairments.[8,9] In subsequent efforts to improve patient access to their health information, patient portals are becoming a common way to provide medical history, medications, labs, imaging, and consults in one place. With memory deficits more commonly occurring in the elderly patient population such as forgetting appointments or losing medical documentation this is a tool that provides reassurance with ability to access anytime.[1,10] Elderly patients even reported that they wished the portal had more information available and that results were updated faster. The use of medical portals showed trends of increased treatment adherence and follow up appointments. Unfortunately, the data also showed a significant downtrend in willingness to use patient portals as age increased over 75.[1]

Wearable devices have been gaining popularity in recent years with new products emerging which are able to monitor heart rate, EKG rhythm, blood glucose, activity, pulse oximetry, and even motion sensors to detect falls. Elderly patients when given activity trackers showed curiosity in the parameters measured and reported checking the parameters throughout their day as well as increased motivation to keep active.[11] In a study conducted by Grammes et al. (2023) continuous glucose monitoring is continually increasing in popularity among patients > 60 years old with diabetes 1 or 2. Nonetheless its use is still significantly declined with increasing age like with the medical portals addressed earlier.[12]

Identified Barriers

When introduced to the option of technology, while many elderly patients show interest, there is still a significant portion who show resistance and fear. Lack of confidence and frustration when presented with technology which was perceived to be more complex resulted in greater unwillingness to use it.[1,6,13] For instance, when older people can't figure out how to fix problems, have difficulty navigating the interfaces, and have difficulty understanding the data by themselves, which makes them frustrated and in turn less likely to keep using the devices.[13] However, in many studies, when patients were given instructions, or interfaces that were easy to use, with clear text, high contrast colours, minimal visuals, and simple menus, the uptake of the technology was much higher and the confidence of its users grew as well. This highlights the necessity of implementing technologies designed specifically for older adults.[14]

A quite significant obstacle presents itself in patients with lower income where buying new devices with which to gain access to digital healthcare is financially impractical. When considering elderly patients, this encompasses a significant portion of people on retirement or approaching this period of their life. For many, this is a time of lower income than during working years where income is heavily based on retirement pension.[15] While these patients may have access to public computers, they are usually found in public places such as libraries and pose a difficulty in commuting for elderly patients.

Family members and caregivers are one of the important pillars for elderly patients, providing mental support and aid in the direct interactions with health care personnel and advanced devices. Consequently, older patients delegate many tasks they perceive as complex or confusing such as checking patient portals, scheduling appointments, taking care of medical documentation, refilling prescriptions, as well as are included in the direct communication from patient to health care professional when regarding symptoms, side effects, or even in clarification of physician recommendations. In consequence, with increasing age and health decline, senior patients are more willing to remain passive and increase reliance on physicians and family members to influence their treatment decisions. The reasons for which may be a multitude of factors such as lack of understanding, trying to lessen the burden they pose to their family or caregivers, or even their wish to conform to perceived expectations.[16,17]

Assumptions are often made by medical personnel that older patients have an aversion to technology or won't have the ability and refrain from offering such digital options. Not only does this exclude these patients from options that may bring great benefits but it can decrease motivation for senior patients to engage in technology and reinforce their fears of making these patients even less likely to attempt to adopt new

technology. It has been shown that positive emotions, and user experience increased patients' perceived difficulty of using digital health. They also demonstrated an increased motivation to use the technology if the technology was perceived to be useful.[18,19]

In a study by Pani et al. elderly patients were afraid to start using technology but after 6 months of consistent usage and instructions they reported feeling more confident and were more receptive to the idea of new technology.[14] It was also found to be important to quickly address any negative experience with technology as quickly as possible and aid in the rebuilding of confidence in a study by Guo et al. (2025).[20] The essential pillars that aid senior patients in adapting to the rapidly evolving digitalization in healthcare are with the attentive involvement of healthcare personnel, the support of family members, and well-designed instructional education.

Discussion

Possible Resolutions

A possible route of exploration can be found in the addition of AI interfaces into patient portals, for instance AI medical concierges which can be accessed via calling by mobile phone, applications which can be accessed by mobile phone or tablets, or websites accessible by computer. Several functions that could be offered by the AI medical concierge are, information and lifestyle recommendations regarding chronic diseases, an overview of medications, reminders to take medications including with prescribed dosages, previous operations or procedures, planned operations or procedures, scheduling and cancelling medical appointments, appointment or follow-up reminders, and information concerning wearable devices.

Information and lifestyle recommendations can be made available to patients based on official diagnoses added by medical personnel which can be accessed as easily as a telephone call, a text, or even a voice recording allowing the patient to ask any questions they may have as many times as needed. Often elderly patients will have questions regarding their diseases or medications but before arriving at their appointments they forget their inquiries or lose the notes they had written their questions down. Other times, questions arise during everyday life and this can provide direct access to the most current medical knowledge without subjecting elderly patients to waiting until their next appointment or instead scrolling through the internet with the hope that the information they find is backed up by evidence based medicine.

With more chronic diseases comes more medications, so it’s not surprising when elderly patients with a list of medications as long as their grocery list become confused as to which drugs they are supposed to take, when, and what dosage. Throughout the course chronic illnesses patient’s medications are changed or dosages adjusted often causing confusion and as a result unknowingly not adhering to the treatment prescribed. By using the AI medical concierge patients could not only verify the current medications and prescribed dosages but set reminders for their drug regimens.[20] Patients could have access to the previous drugs made available with explanations for the change in treatment or dosage entered by the physician. Additionally, despite warnings by medical personnel, elderly patients have difficulty remembering the extensive lists of drug interactions which can lead to dangerous medical situations. Such emergencies could be avoided with a simple inquiry or even a photo of the drug or supplement in question to the AI medical concierge which includes a list of the current medications a patient is taking.

Operations and procedures are stressful for patients of all ages, more commonly scheduled for older patients as their health condition starts to decline. Before and after many procedures patients are required to do lab work, adhere to special diets, and introduce or halt particular drugs. Despite thorough explanation by healthcare personnel, whether it may be due to memory problems, misunderstanding or due to lack of education, many older patients are noncompliant in their pre- or post-operative treatment steps. For example, perioperative anticoagulants should be correctly managed with the aim of reducing perioperative complications, however in the study conducted by Munk et al. (2023) noncompliance of patients over the age of 70 to one of the steps of perioperative anticoagulation management was 81% in patients using VKAs and 55% in patients using DOACs. In most cases, VKAs or DOACs were interrupted for longer than recommended.[21] Additionally, it is not uncommon for elderly patients to sign consent forms without entirely understanding the procedures or risks entailed.[22] AI medical concierges can be utilised for drug management, as described previously, as well as extending its function to perioperative treatment plans, and patient education using multimedia.The understanding and careful adherence to these treatment plans is key in attaining the best results and minimising adverse events.

With the use of AI algorithms, which can analyze large amounts of continuously gathered data from wearable devices, looking for changes, such as irregularities or patterns, which may reflect a decline in patient

condition before the patient has recognizable symptoms or in situations where the patient is no longer able to communicate due to disability or rapid decline in health condition. With large amounts of data, an AI medical concierge can minimize the burden placed on medical personnel with presentation of data in a clear and concise manner encouraging adoption by both clinician and elderly patients since simpler is less deterring than seeming complicated.[1] While clinicians value a constant collection of multiple parameters continuously shared through programs or apps allowing the detection of these abnormalities resulting in prevention or dampening of adverse events allowing intervention at earlier stages medical personnel reported time wasted due to false alarms because of artifacts caused by external factors such as patient movements.[5,23,24,25,26] Despite the leaps in wearable device technology, both clinicians and patients are left yearning for better, encouraging the development of AI technology which is able to filter false alarms and more user-friendly interfaces for older patients.

Promotion of the establishment/improvement of retirement communities and senior community centers by encompassing a multidimensional approach offering a mix of social engagement, healthcare promotion, and access to technology. Research shows that older adults participating in social interactions have lower risk of depression, feel less lonely, and improved physical functioning.[27] By facilitating additional access to healthcare professionals such as nurses, general practitioners, and health educators such centers can become hubs for preventive care and ongoing health management.[28] Including access to shared public computers and internet access can improve digital literacy for seniors who either cannot afford or do not feel comfortable using digital devices without support. Studies on digital inclusion emphasize that access alone is not enough to encourage digital curiosity, and that structured instructional classes are essential for building confidence and digital literacy among elderly adults.[4,29] Such classes could cover a variety of topics from basic device use to navigating online health portals, telemedicine interfaces, and social communication tools in an environment where support can come from dedicated educators and fellow seniors. Senior centers, village networks, and age-friendly community hub models have already demonstrated that this integrated approach can improve quality of life for older adults in a multifaceted approach.[30]

Another area in need of reform is the attitude of health care workers, where there is little time, and elderly patients require more effort and patience than their younger counterparts. Instead of excluding these patients from options involving technology, infrastructure for patient education should be offered, for instance, in the form of consultants and instruction. The shift from one-on-one patient care to the inclusion of digital healthcare should be introduced slowly with complementary action in order to preserve trust between providers and senior patients as well as build confidence while experiencing the benefits that technology brings to the table.[31]

The final obstacle that demands tackling urgently during the development of medical technology, is research and catering to senior patient preferences and including patients in clinical trials. Within the umbrella term that is senior patients, are many divisions, such as age or impairments, leading to underrepresentation for large groups of patients in digital health. A systematic method for testing new technology, particularly in elderly patients clearly warrants development immediately. Unless the appropriate groups have the chance to review these new technologies, low participation and suboptimal utilization negates the large investment in improving patient's life quality.[32] It is vital for medical devices and user interfaces to be catered to the largest population in need.

Conclusions

Moving forward, these findings suggest the need for future research in the improvement of system interfaces, perhaps even providing multiple interfaces to choose from depending on age or impairment, for example separate interfaces for children, adults, and seniors. With such an option, different groups of people would be given the opportunity to use device interfaces catered to their needs and mental capabilities. In addition, there should be more focus on trials with new technologies with the appropriate age groups and improvements made upon the results, so that the final product is catered to the preferences of its future users. Another point to consider is adding additional features such as AI aid and analysis for improvement of independent patient navigation of new technologies. Lastly, an increase in support of senior community centers to include access to instructional education and support of medical interfaces and operation of medical devices. Ultimately, by prioritizing inclusive designs and comprehensive user education, current and future technologies could allow senior patients to actively and independently manage their health.

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All authors have read and agreed with the published version of the manuscript.

Funding Statement: The article did not receive any funding.
Institutional Review and Board Statement: Not applicable.
Informed Consent Statement: Not applicable.
Data Availability Statement: Not applicable.
Conflict of Interest Statement: No conflicts of interest to declare.

REFERENCES

1. Farivar, S., Abouzahra, M., & Ghasemaghaei, M. (2020). Wearable device adoption among older adults: A mixed-methods study. International Journal of Information Management, 55, 102209. https://doi.org/10.1016/j.ijinfomgt.2020.102209
2. Leenen, J. P. L., Dijkman, E. M., van Hout, A., Kalkman, C. J., Schoonhoven, L., & Patijn, G. A. (2022). Nurses' experiences with continuous vital sign monitoring on the general surgical ward: a qualitative study based on the Behaviour Change Wheel. BMC Nursing, 21(1). https://doi.org/10.1186/s12912-022-00837-x
3. Banskota, S., Healy, M., & Goldberg, E. (2020). 15 Smartphone Apps for Older Adults to Use While in Isolation During the COVID-19 Pandemic. WestJEM 21.3 May Issue, 21(3). https://doi.org/10.5811/westjem.2020.4.47372
4. Arthanat, S. (2019). Promoting Information Communication Technology Adoption and Acceptance for Aging-in-Place: A Randomized Controlled Trial. Journal of Applied Gerontology, 40(5), 073346481989104. https://doi.org/10.1177/0733464819891045
5. Khan, S. M. (2025). Fundamentals of AI for Medical Education, Research and Practice. Academic Press.
6. Emmesjö, L., Hallgren, J., & Catharina Gillsjö. (2025). Older adults' digital technology experiences: a qualitative study. BMC Digital Health, 3(1). https://doi.org/10.1186/s44247-025-00163-7
7. Jože Guna, Rok Kovač, Emilija Stojmenova, & Matevž Pogačnik. (2011). MedReminder - An Interactive Multimedia Medical Application for the IPTV Environment. Lecture Notes in Computer Science, 635–644. https://doi.org/10.1007/978-3-642-25364-5_45
8. Singh, G., Brand, S. J., & Steenkamp, V. (2025). Transitioning to quick response codes for patient information leaflet delivery. Exploratory Research in Clinical and Social Pharmacy, 17, 100563–100563. https://doi.org/10.1016/j.rcsop.2025.100563
9. Matei, A., Chin, Y. F., Hughes, T., & Mahmalji, W. (2025). Implementing Quick Response (QR)-Coded Patient Information Leaflets to Reduce Environmental Impact in Urology Outpatient Clinics: A Pilot Study. Cureus. https://doi.org/10.7759/cureus.87891
10. Hertzog, C., Lustig, E., Pearman, A., & Waris, A. (2019). Behaviors and Strategies Supporting Everyday Memory in Older Adults. Gerontology, 65(4), 419–429. https://doi.org/10.1159/000495910
11. Zhang, Z., Giordani, B., Margulis, A., & Chen, W. (2022). Efficacy and acceptability of using wearable activity trackers in older adults living in retirement communities: a mixed method study. BMC Geriatrics, 22(1). https://doi.org/10.1186/s12877-022-02931-w
12. Grammes, J., Schmid, S., Bozkurt, L., Heinemann, L., Hess, G., Kubiak, T., Küstner, E., Priesterroth, L., Ståhl, C., & Holl, R. W. (2023). Continuous glucose monitoring in older adults with diabetes: Data from the diabetes prospective follow-up (DPV) registry. Diabetic Medicine. https://doi.org/10.1111/dme.15261

13. He, H., Raja, & Salwa Hanim Abdul-Rashid. (2025). A Systematic Review of the Usability of Telemedicine Interface Design for Older Adults. Applied Sciences, 15(10), 5458–5458. https://doi.org/10.3390/app15105458
14. Pani, J., Lorusso, L., Toccafondi, L., D'Onofrio, G., Ciccone, F., Russo, S., Giuliani, F., Sancarlo, D., Calamida, N., Vignani, G., Pihl, T., Rovini, E., Cavallo, F., & Fiorini, L. (2024). How Time, Living Situation, and Stress Related to Technology Influence User Acceptance and Usability of a Socialization Service for Older Adults and Their Formal and Informal Caregivers: Six-Month Pilot Study. JMIR Aging, 7, e54736–e54736. https://doi.org/10.2196/54736
15. Ioannis Laliotis, S. Mujaheed, Charitini Stavropoulou, & Kyriazis Dimitrios. (2023). Retirement and Household Expenditure in Turbulent Times. Journal of Family and Economic Issues, 44(4), 968–989. https://doi.org/10.1007/s10834-022-09884-7
16. Chi, W. C., Wolff, J., Greer, R., & Dy, S. (2017). Multimorbidity and Decision-Making Preferences Among Older Adults. The Annals of Family Medicine, 15(6), 546–551. https://doi.org/10.1370/afm.2106
17. Heidenreich, A., Elsner, S., Wörler, F., Joachim Hübner, Schües, C., Christoph Rehmann-Sutter, Katalinic, A., & Gieseler, F. (2023). Physicians' perspectives on family caregivers' roles in elderly cancer patients' therapies: a qualitative, interview-based study. Supportive Care in Cancer, 31(7). https://doi.org/10.1007/s00520-023-07857-6
18. Wang, Q., Hou, F., Jin, Z., & Wang, N. (2025). The Impact of Positive Psychology on Technology Acceptance Among the Elderly. Advances in Social Science, Education and Humanities Research, 515–521. https://doi.org/10.2991/978-2-38476-384-9_59
19. Bellingtier, J. A., & Neupert, S. D. (2016). Negative Aging Attitudes Predict Greater Reactivity to Daily Stressors in Older Adults. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 73(7), gbw086. https://doi.org/10.1093/geronb/gbw086
20. Guo, Y., Peng, R., Zhang, C., Li, X., Du, Y., Chen, Y., Lu, Y., Li, Z., & Feng, H. (2025). Application of digital health products in community-dwelling older adults: A scoping review. Geriatric Nursing, 64, 103420. https://doi.org/10.1016/j.gerinurse.2025.103420
21. Munk, L., Tom van Essen, van, Nolte, P. A., & Becker, M. (2023). Compliance to perioperative anticoagulation protocols in elderly patients undergoing elective orthopedic procedures: a retrospective observational cohort study on 548 patients. Patient Safety in Surgery, 17(1). https://doi.org/10.1186/s13037-023-00357-w
22. Stanley, B., Guido, J., Stanley, M., & Shortell, D. (1984). The elderly patient and informed consent. Empirical findings. JAMA, 252(10), 1302–1306. https://pubmed.ncbi.nlm.nih.gov/6471248/
23. Ferguson, C., Inglis, S. C., Breen, P. P., Gargiulo, G. D., Byiers, V., Macdonald, P. S., & Hickman, L. D. (2020). Clinician Perspectives on the Design and Application of Wearable Cardiac Technologies for Older Adults: Qualitative Study. JMIR Aging, 3(1), e17299. https://doi.org/10.2196/17299
24. Lewy, H. (2015). Wearable technologies – future challenges for implementation in healthcare services. Healthcare Technology Letters, 2(1), 2–5. https://doi.org/10.1049/htl.2014.0104
25. Noort, van, Becking-Verhaar, F. L., Wilmieke Bahlman-van Ooijen, Pel, M., Harry van Goor, & Getty Huisman-de Waal. (2024). Three Years of Continuous Vital Signs Monitoring on the General Surgical Ward: Is It Sustainable? A Qualitative Study. Journal of Clinical Medicine, 13(2), 439–439. https://doi.org/10.3390/jcm13020439
26. Joshi, M., Archer, S., Morbi, A., Ashrafian, H., Arora, S., Khan, S., Cooke, G., & Darzi, A. (2022). Perceptions on the Use of Wearable Sensors and Continuous Monitoring in Surgical Patients: Interview Study Among Surgical Staff. JMIR Formative Research, 6(2), e27866. https://doi.org/10.2196/27866https://doi.org/10.3390/jcm13020439
27. Gariépy, G., Honkaniemi, H., & Quesnel-Vallée, A. (2016). Social support and protection from depression: Systematic review of current findings in western countries. British Journal of Psychiatry, 209(4), 284–293. https://doi.org/10.1192/bjp.bp.115.169094
28. Boult, C., Reider, L., Leff, B., Frick, K. D., Boyd, C. M., Wolff, J. L., Frey, K., Karm, L., Wegener, S. T., Mroz, T., & Scharfstein, D. O. (2011). The Effect of Guided Care Teams on the Use of Health Services. Archives of Internal Medicine, 171(5). https://doi.org/10.1001/archinternmed.2010.540
29. Yoo, H. J. (2021). Empowering Older Adults: Improving Senior Digital Literacy. American Association for Adult and Continuing Education 2020 Conference (Online, Oct 27-30, 2020). https://www.researchgate.net/publication/362781241_Empowering_Older_Adults_Improving_Senior_Digital_Literacy
30. Greenfield, E. A., Scharlach, A. E., Lehning, A. J., Davitt, J. K., & Graham, C. L. (2013). A Tale of Two Community Initiatives for Promoting Aging in Place: Similarities and Differences in the National Implementation of NORC Programs and Villages. The Gerontologist, 53(6), 928–938. https://doi.org/10.1093/geront/gnt035
31. Terp, R., Kayser, L., & Lindhardt, T. (2021). Older Patients' Competence, Preferences, and Attitudes Toward Digital Technology Use: Explorative Study. JMIR Human Factors, 8(2), e27005. https://doi.org/10.2196/27005
32. Isaković, M., Sedlar, U., Volk, M., & Bešter, J. (2016). Usability Pitfalls of Diabetes mHealth Apps for the Elderly. Journal of Diabetes Research, 2016, 1–9. https://doi.org/10.1155/2016/1604609