

LETTER TO THE EDITOR

Opportunities of digital health in primary care



Oportunidades de la sanidad digital en la atención primaria

Digital health services (DHS) can promote self-care, reduce the burden of care, improving the efficiency and accessibility of the health system.¹ This is absolutely necessary in a context of an ageing population. People have experienced an increase in longevity highlighting the need to transform a face-to-face healthcare model, overwhelmed by the increase in demand for care. This new model would focus on prevention, improving continuity of care and communication between levels, involving citizens in their healthcare and disease control, where DHS could play a key role.^{2,3} Furthermore, the increase in the demand for care has not translated into a proportional growth in the number of healthcare professionals generating an excessive burden of assistance in the public health system.⁴

At the primary care level, the overload is even greater. Primary care (PC) is one of the basic pillars of our National Health System, constituting the first point of contact with health services, and where 80–90% of health problems are solved.⁵ So, it is necessary a rethink of health systems because the perception of citizens is of low quality.⁶ It is not only a change in terms of clinical care, but also a move towards personalised preventive medicine.⁷ To incorporate this it is necessary to rethink roles and functions of healthcare professionals and other agents involved, such as the system's users. These changes must go hand in hand with the digital transformation of healthcare.⁷

When thinking about the future of healthcare, digitalisation is an essential element.⁸ In fact, the Society of Family and Community Medicine highlights telematic care to improve accessibility as one of the possible solutions to address the deep crisis facing PC in Spain, along with better coordination, comprehensiveness, and longitudinality.⁹

DHS are enabling the emergence of new tools that offer advantages for patients with regard to certain actions related to their care.¹⁰ Among them, m-Health¹¹ and smartphones with the use of specific apps have become very useful tools for medicine, making it possible to bring healthcare closer to inaccessible areas, to monitor the patient's pathology at any time and place, and to promote healthy habits.

Furthermore, the use of such tools could reduce the time spent accessing and analysing health information by 30% and monthly medical costs by 22%.¹²

However, digitalisation is not progressing at the desired pace. Health professionals consider that there is a significant gap in the current level of digitalisation of Spanish healthcare.¹³ Privacy and security issues¹³ and digital breach are the major barriers to greater use of this technology.¹⁴ The World Economic Forum defines the digital breach as "the differential ability to access data and digital technologies".¹⁴ It is closely related to economic development, cultural dimensions, age, gender, between other.¹⁵ Digital literacy, understood as the acquisition of the skills and abilities necessary for the use of technologies, will be decisive for equity in access and use of electronic health tools.¹⁶ Furthermore, the WHO's "Draft Global Strategy 2020–2025" considers that digital health will be an enabler to ensure that one billion more people in the world benefit from universal health coverage benefit from universal health coverage.¹⁷

Digital transformation marks a new era in primary care that empowers patients and communities through improved access to care; reduces costs; enables health services to reach the most vulnerable populations; supports inter-professional collaborative practice; and facilitates access to health or the wider community.¹⁸ Clear examples of this are seen daily in the primary care consultations; "vive sin tabaco mobile application" to give up smoking,¹⁹ text messaging to remember upcoming appointments,²⁰ and mobile applications monitoring therapeutic adherence.²¹

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Conflicts of interest

The authors declare no conflicts of interest.

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References

1. Fernández C. El paciente digital y la e-Salud. https://www.fundacionmercksalud.com/wp-content/uploads/2019/02/Paciente_digital.DEF.pdf [accessed 9.9.22].
2. Zaman SB, Khan RK, Evans RG, Thrift AG, Maddison R, Islam SMS. Exploring barriers to and enablers of the adoption of information and communication technology for the care of older adults with chronic diseases: scoping review. *JMIR Aging*. 2022;5:e25251, <http://dx.doi.org/10.2196/25251>.
3. World Health Organization. Ageing and health. <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health> [accessed 16.3.23].
4. Pérez-Francisco DH, Duarte-Clíments G, Del Rosario-Melián JM, Gómez-Salgado J, Romero-Martín M, Sánchez-Gómez MB. Influence of workload on primary care nurses' health and burnout, patients' safety, and quality of care: integrative review. *Healthcare (Basel)*. 2020;8:12, <http://dx.doi.org/10.3390/healthcare8010012>.
5. Violán B. Bolibar investigación biomédica. Papel de la atención primaria. *Med Clin (Barc)*. 2006;126:614–5.
6. Irving G, Neves AL, Dambha-Miller H, Oishi A, Tagashira H, Verho A, et al. International variations in primary care physician consultation time: a systematic review of 67 countries. *BMJ Open*. 2017;7:e017902, <http://dx.doi.org/10.1136/bmjopen-2017-01790>.
7. Encuesta de la Sanidad Privada 2022. <https://www.fundacionidis.com/informes/barometros-y-encuestas-de-la-sanidad-privada/encuesta-de-la-sanidad-privada-2022> [accessed 26.3.23].
8. Healthcare Sanidad del Futuro y Medicina Personalizada de Precisión. https://www.institutoroche.es/recursos/publicaciones/209/Sanidad_del_Futuro_y_Medicina_Personalizada_de_Precision [accessed 26.3.23].
9. Estévez J, Guerrero M. Soluciones para la gestión de la cronicidad. España: SEDISA; 2014. <https://studylib.es/doc/1002282/%E2%80%9Csoluciones-para-la-gesti%C3%B3n-de-la-cronicidad%E2%80%9D> [cited 28.1.19, accessed 2.2.22].
10. Busse TS, Nitsche J, Kernebeck S, Jux C, Weitz J, Ehlers JP, et al. Approaches to improvement of digital health literacy (eHL) in the context of person-centered care. *Int J Environ Res Public Health*. 2022;19:8309, <http://dx.doi.org/10.3390/ijerph19148309>.
11. Shao M, Fan J, Huang Z, Chen M. The impact of information and communication technologies (ICTs) on health outcomes: a mediating effect analysis based on cross-national panel data. *J Environ Public Health*. 2022;2022:2225723, <http://dx.doi.org/10.1155/2022/2225723>.
12. Whaley CM, Bollyky JB, Lu W, Painter S, Schneider J, Zhao Z, et al. Reduced medical spending associated with increased use of a remote diabetes management program and lower mean blood glucose values. *J Med Econ*. 2019;22:869–77.
13. La digitalización no avanza al ritmo requerido, según los profesionales. <https://diariofarma.com/2022/09/21/la-digitalizacion-no-avanza-al-ritmo-requerido-segun-los-profesionales> [accessed 26.3.24].
14. World Economic Forum. The global risks report 2021 16th edition. Published by the World Economic Forum. https://www3.weforum.org/docs/WEF_The_Global_Risks_Report_2021.pdf [accessed 26.3.24].
15. Vidal-Alaball J, Belmonte IA, Zafra RP, Escalé-Besa A, Oliva JA, Pérez CS. *Aten Primaria*. 2023;55:1–9.
16. Alarcón Belmonte I, Sánchez Collado R, Yuguero O, Acezart Oliva J, Martínez-Millana A, Saperas Pérez C. La alfabetización digital como elemento clave en la transformación digital de las organizaciones en salud [Digital literacy as a key element in the digital transformation of health organizations]. *Aten Primaria*. 2024;19:102880, <http://dx.doi.org/10.1016/j.aprim.2024.102880>. Spanish.
17. Global strategy on digital health 2020–2025. World health organization. <https://www.who.int/docs/default-source/documents/gsdhdaa2a9f352b0445bafbc79ca799dce4d.pdf> [accessed 24.3.24].
18. Global goal of universal connectivity. Geneva: ITU/UNESCO broadband commission for sustainable development; 2021. Available from: <https://www.broadbandcommission.org/manifesto/> [accessed 26.3.24].
19. Cobos-Campos R, Apiñaniz A, Sáez de Lafuente A, Parraza N. Development, validation and transfer to clinical practice of a mobile application for the treatment of smoking. *Aten Primaria*. 2022;54:102363, <http://dx.doi.org/10.1016/j.aprim.2022.102363>.
20. Ulloa-Pérez E, Blasi PR, Westbrook EO, Lozano P, Coleman KF, Coley RY. Pragmatic randomized study of targeted text message reminders to reduce missed clinic visits. *Perm J*. 2022;26:64–72, <http://dx.doi.org/10.7812/TPP/21.078>.
21. Peng Y, Wang H, Fang Q, Xie L, Shu L, Sun W, et al. Effectiveness of mobile applications on medication adherence in adults with chronic diseases: a systematic review and meta-analysis. *J Manag Care Spec Pharm*. 2020;26:550–61, <http://dx.doi.org/10.18553/jmcp.2020.26.4.550>.

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