

Unlocking the Future of Primary Health Care: The Digital Era Unleashed

Foresight-informed policy factsheet

Prepared by Mariana Peyroteo, Mélanie Maia, Marília Silva Paulo & Luís Velez Lapão, Universidade NOVA de Lisboa, Portugal
Reviewed by Claudia Habl (GÖG) & Hanna Tolonen (THL)

Recommendations & Key messages

- Climate change and lack of response capacity will impact Primary Health Care (PHC), so it is vital to enhance care delivery, encourage patient engagement, and adopt digital solutions as the best approach to address these challenges.
- Digital tools can improve healthcare by making it more efficient, improving communication and engaging patients, as demonstrated during the COVID-19 pandemic.
- Investing in research and innovation within Health Services is crucial for sustainable preparedness plans and improved value for patients and systems.
- It's crucial that changes are made to the healthcare system, otherwise, it won't be able to handle the anticipated demand.
- **An effective approach to enhancing patient care involves integrating digital services with robust governance policies and strategic investments in technology.**

Background and objective

Better quality, improved evidence-based practices and more patient-centered care are often associated with health digitalization and technological innovation¹. The COVID-19 pandemic brought a higher demand for health services, forcing the Portuguese PHC administrators to quickly leverage and integrate existing technology to provide remote consultations to reach their citizens better.

Even with technological advances, digitalization still has a significant area for improvement: ensuring the sustainability of artifacts post-implementation², achieving the sustainability of digital health services will depend on the engagement of health professionals, and the adequacy of the implementation of the PHC services digitalization. Therefore, it is necessary to understand better the potential of digital tools for the future of PHC services and how this process can also help patients be more active in their health self-management³.

The Portuguese context

The Portuguese National Health Service (NHS) is designed by law to be universal, general, public-funded and organised with three main levels of care: primary, secondary, and tertiary⁵. PHC is the population's first contact with health services and has undergone several reforms over the years focused on improving access, organisation, quality, and satisfaction with health services⁶. In Portugal, PHC is provided by Health Centers Groups with an autonomous mandate for delivery care at a local (sub-regional) level. As the NHS is a complex organization in terms of system management, it needs to provide better answers to the care and network issue, as well as promote greater engagement and governance to enhance the role of PHC and facilitate interaction with hospitals, optimizing access to specialized care.

In Portugal, digital health care was introduced at the end of the 20th Century with a set of governmental measures. A good example is the implementation of telemedicine in the Paediatric Cardiology service⁷.

The objective of this policy brief is to assess the impact and influence of the digitalisation of Primary Health Care to define a set of actions to be developed for a more effective implementation and to support the formulation of evidence-based policies.

Results

A foresight study was conducted to analyze strategic and operational scenarios with a time frame of ten years (between 2022 and 2032), looking into the timespan at the ACES Arco Ribeirinho. Based on previous literature reviews and stakeholder interviews, a conceptual model of PHC services was developed to consider the role of information in PHC (e.g., supported by digital services). The study involved three workshops with ten professionals from different specialties of the ACES Arco Ribeirinho.

This study followed the methodology proposed by Lapão and Thore, which is divided into three stages: understanding the context, developing scenarios, and their analysis⁴.

During the first workshop, relevant data to understand the context and to identify (by consensus) which uncertainties the participants considered more significant for the next ten years in 2022 was collected. In the second workshop, narratives were developed by combining the expected impact of the driving forces and the PHC's context to be investigated. During the third workshop, the final descriptions for each scenario were validated with additional data and references. The main focus was to discuss and reflect on the measures and actions to take if faced with these situations, as well as monitoring indicators to influence or mitigate the course of events to improve ACES resilience (**Figure 1**).

Through the analysis of the evolution of internal and external trends to the ACES, most frequently mentioned were identified: governance and organization of services, climate change, investment in technology, and community behavior and engagement. As a result, three scenarios were developed: “*Digital PHC and active patients*”, “*NHS Transition*”, and “*Climate exigency*”.

Scope

ACES Arco Ribeirinho, located in the peripheral area of Lisbon in Portugal, covers around 232,000 registered patients. This ACES is made up of nine Family Health Units (FHU) that provide services in various specialties and have as its central vision “*to reinvent the organization model of PHC, through management adjusted to the new challenges and needs of the population and that allows the achievement of health gains*”. These FHUs have also been intervened with electronic health records to facilitate access to information. Likewise, new clinical governance rules allowed the inclusion of research objectives in the commissioning process, often enabling significant growth in PHC research.

Digital PHC and active patients

In this scenario, the government is expected to invest in technologies and in the digitalization of the most significant PHC Service (e.g., teleconsultation, monitoring, and interaction with the hospital).

- ▲ Digital technologies have improved communication between patients and health professional.
- ▲ **With the increased stakeholder connection, patients have become more involved and active in managing their health.**

NHS Transition

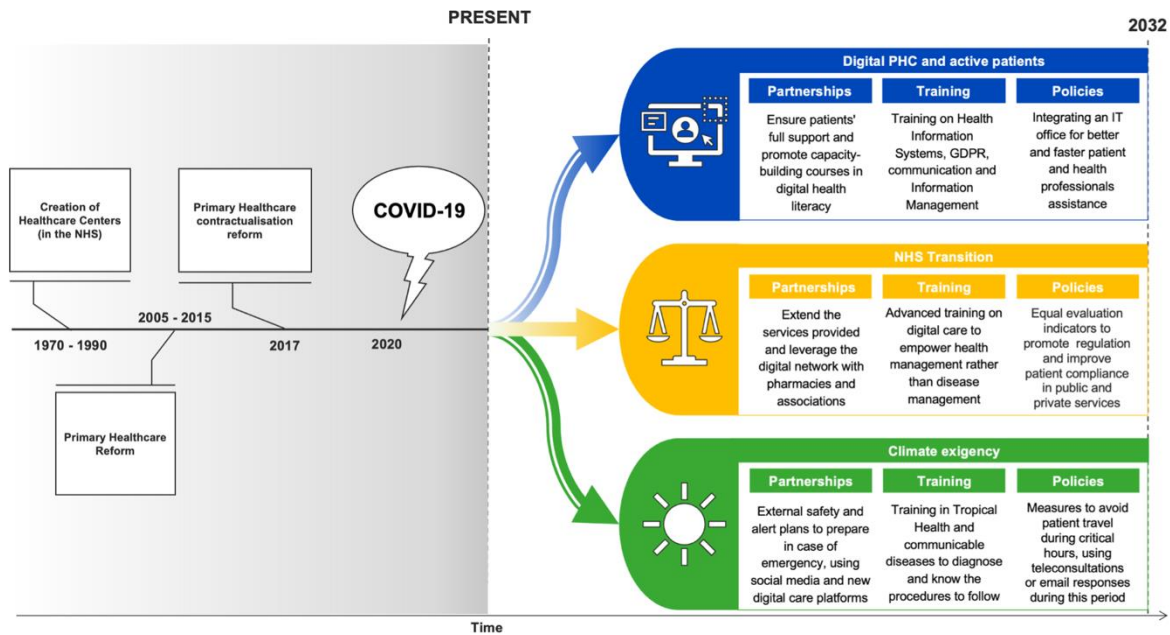
In this scenario, the NHS has suffered an increasingly serious loss of human resources and Private health services are becoming more present, making it a 60% public and 40% private/social Health Service.

- ▲ With the increase in service providers, health information and data have become widely distributed.
- ▲ **With the disruption of health services, digital tools have made it possible to ensure interoperability and transmission of information in an effective way.**

Climate exigency

In this scenario, Portugal suffers constant climatic fluctuations, leading to a successive increase in the warmer temperature and a decrease in the colder temperature, with more droughts, floods and storms.

- ▲ In the ACES Arco Ribeirinho area, this has led to an ideal health context to trigger the increasing decompensation of chronic diseases associated with seasonality.
- ▲ **With the impact of climate change on the daily lives of the population (health professionals and patients), digital tools allow the development of safe and protective solutions.**



Copyright: UNL

Figure 1 - Policy overview for the scenarios

References

1. World Health Organization. *Relatório Mundial de Saúde 2010: Financiamento dos Sistemas de Saúde*; 2010. https://www.who.int/whr/2010/whr10_pt.pdf?ua=1
2. Lapão LV. The Future of Healthcare: The Impact of Digitalization on Healthcare Services Performance. In: Pereira Neto A, Flynn MB, eds. *The Internet and Health in Brazil: Challenges and Trends*. Springer International Publishing; 2019:435-449. doi:10.1007/978-3-319-99289-1_22
3. World Health Organization. Recommendations on digital interventions for health system strengthening. *WHO guideline*. Published online 2019:124.
4. Lapão LV, Thore S. Prioritizing R&D projects in the face of technological and market uncertainty: Scenario planning in the telecommunication business. In: ; 2002:87-104. doi:10.1007/978-1-4615-1001-7_6
5. Lourenço A. *Sistema de saúde português: Um caminho para a proteção social universal da saúde em Portugal*. Organização Internacional do Trabalho; 2018. files/10843/Lourenço - Sistema de saúde português Um caminho para a pro.pdf
6. Biscaia AR, Heleno LCV. Primary Health Care Reform in Portugal: Portuguese, modern and innovative. *Cien Saude Colet*. 2017;22(3):701-711. doi:10.1590/1413-81232017223.33152016
7. Castela E, Ramalheiro G, Pires A, et al. Cinco Anos de Teleconsulta Experiência do Serviço de Cardiologia do Hospital Pediátrico de Coimbra. *Revista Portuguesa de Cardiologia*. 2005;24(6):835-840.

Disclaimer

The content of this document represents the views of the author only and is his/her sole responsibility. The European Research Executive Agency (REA) and the European Commission are not responsible for any use that may be made of the information it contains.