



The Digital Transformation in Primary Care in Greece: Benefits and Challenges in the aftermath of the COVID-19 pandemic.



Dr Zoi Tsimtsiou,

Assoc. Professor of Hygiene, Social and Preventive Medicine, School of Medicine,
Aristotle University of Thessaloniki, Greece

Overview of this flash talk

- Information regarding digitalisation in prescribing in Greece before the COVID-19 pandemic
- The results concerning digitalisation as a positive impact of the pandemic on PC and the associated challenges from a qualitative study of focus groups and individual interviews in PHC providers.



Digitalisation in prescribing before the pandemic

- An ePrescription system for doctors became compulsory in Greece in 2012, replacing handwritten prescriptions and diagnostic test referrals-
 - as one of the reforms implemented after the economic crisis began,
 - a nationwide web-based system with a universal penetration
 - ePrescription enabled the prescription renewal period to be extended for up to six months based on patient needs
- Although a wide range of tools and services were developed around ePrescription, many functions were not implemented because of resistance from professional groups, safety and data protection issues, or even inertia.
- Therefore, during previous years, although an electronic system had been implemented, patients had to visit their doctors in person to get their paper copy printed, signed and stamped, even for refilling prescriptions for patients with chronic conditions.

THE PANDEMIC AS A CATALYST IN THE TRANSITION TO PAPERLESS ePRESCRIPTION

- Introducing a paperless electronic prescription (ePrescription) system proved to be a game-changer that enabled primary care services to respond effectively to the extremely challenging circumstances and also triggered further digitalisation of the health system

The image shows the cover of a report from the World Health Organization, Regional Office for Europe, Country Vignette for Greece. The cover features a red and blue color scheme. At the top left is the WHO logo and text: 'World Health Organization REGIONAL OFFICE FOR Europe'. At the top right is a circular logo with the text 'COUNTRY VIGNETTE'. The main title 'GREECE' is in large white letters, followed by the subtitle 'Transforming primary health care during the pandemic'. Below this is a yellow banner with the text 'INTRODUCING PAPERLESS, REMOTE ePRESCRIPTION – A GAME-CHANGER FOR PRIMARY CARE SERVICES'. Underneath the banner, the authors are listed: 'Authors: Zoi Tsimtsiou, Family Medicine Specialist, Associate Professor of Hygiene, Social and Preventive Medicine, School of Medicine, Aristotle University of Thessaloniki; Evangelos Fragkoulis, Family Medicine Specialist, primary health care expert; Sotirios Koupidis, Occupational Doctor, WHO Country Office in Greece; Pavlos Theodorakis, Senior Health Policy Adviser, WHO Country Office in the Russian Federation'. The bottom half of the cover features a photograph of a person's hands holding a smartphone displaying the 'myHealth' app interface, which includes logos for 'HAKKA' and 'govgr'. A small copyright notice at the bottom right reads '@School of medicine / Aristotle University of Thessaloniki'.

World Health Organization
REGIONAL OFFICE FOR Europe

COUNTRY VIGNETTE

GREECE Transforming primary health care during the pandemic

INTRODUCING PAPERLESS, REMOTE ePRESCRIPTION – A GAME-CHANGER FOR PRIMARY CARE SERVICES

Authors: Zoi Tsimtsiou, Family Medicine Specialist, Associate Professor of Hygiene, Social and Preventive Medicine, School of Medicine, Aristotle University of Thessaloniki; Evangelos Fragkoulis, Family Medicine Specialist, primary health care expert; Sotirios Koupidis, Occupational Doctor, WHO Country Office in Greece; Pavlos Theodorakis, Senior Health Policy Adviser, WHO Country Office in the Russian Federation

myHealth
HAKKA
govgr

@School of medicine / Aristotle University of Thessaloniki

FURTHER DIGITALISATION OF THE HEALTH SYSTEM

- An electronic COVID-19 patient registry to monitor patients diagnosed with COVID-19 and to ensure continuity of care.
- A dedicated website (emvolio.gov.gr) for Greece's COVID-19 vaccination programme, was developed, providing information and access to an appointment management application built on the standards of an airline booking system.
- People registered in the paperless ePrescription system automatically received an SMS and/or an email with their assigned appointment number when they became eligible for vaccination, including the date and time of vaccination and the vaccination centre.
- The described procedure represents an illustrative example on the interoperability of electronic services.

The impact of COVID-19 pandemic on Primary Health Care through “health providers’ eyes”: A qualitative study of focus groups and individual interviews in Greece

- We aimed to explore the positive and negative impact of the pandemic, during its final wave, through “PHC providers’ eyes”, as well as their recommendations towards restructuring and enhancing PHC services.
- A two-phase qualitative study was conducted, pursuing data triangulation from 4 Focus Groups (FGs) and 24 participants and 17 individual, semi-structured interviews (summer 2022 and spring 2023, respectively).
- 5 PHC units according to location with different population distribution; 1 in Athens (FGs) and 4 in Northern Greece (interviews).

The positive impact

1. Acceleration of digitalisation in PHC.
2. Establishment of health protection measures in PHC services.
3. Organisation of patient access in PHC units.
4. Recognition of the role of PHC.
5. Raise in public awareness of primary prevention.
6. Enhancement of team-collaboration
7. Increase in health providers' self-efficacy
8. Appointment of health professionals.

The negative impact

1. Patient safety concerns.
2. Fatigue / Burnout in PHC providers.
3. Changes in patients' behaviour.



Acceleration of digitalisation in PHC- The positive impact of the pandemic “through PHC providers’ eyes”

- The pandemic acted as a catalyst in implementing digitalisation in PHC.
 - a. Introduction of paperless, remote prescription**
 - b. Familiarisation with e-platforms for administrative and e-learning purposes**
 - c. Telemedicine**
 - d. Shift in appointment booking procedure**

a. Introduction of paperless, remote prescription: Benefit

- The electronic prescription system that emerged through the need to avoid physical contact proved to be a game-changer that enabled PHC to respond effectively to the challenging circumstances.

We were able to integrate technology with paperless, remote prescription being the most notable example. Patients could get medication via SMS on their mobile phones. FG-P8, Health Promotion Specialist

Paperless, remote prescribing helps a lot. This is very convenient for both patients and doctors. I-P1, GP

- Yet, concerns have been expressed that digital advancements might not be of universal benefit, as the elderly and those without a personal mobile device still required printed prescriptions and referrals.

b. Familiarisation with e-platforms for administrative and e-learning purposes: Benefit

- The pandemic triggered the use of pre-existing online communication platforms, which became indispensable, as participants curbed unnecessary travel, save time and income.

One that worked very well and has now left a legacy at the level of cooperation between PHC directors and Health District administrations, and also in education, is teleconferencing. I-P1, GP

c. Telemedicine: Benefit

- The pandemic familiarised patients and physicians with the option of remote consultations. Many patients opted for remote consultations even when physical access to PHC services was feasible, highlighting the potential of telemedicine's routine use.

After about 2 years, a large percentage of regular, outpatient appointments are now conducted remotely. I-P9, GP

d. Shift in appointment booking procedure

- Enabling PHC providers to better organise daily workload, booking appointments became mandatory, while a digital booking procedure also was introduced.

...I think the appointment-booking process also helped a lot. Not only us but also patients themselves... because they don't have to wait for hours. I-P16, Nurse

Acceleration of digitalisation in PHC- the challenges “through PHC providers’ eyes”

1. Strengthen citizens’ health literacy to empower their active participation in healthcare, through safe utilisation of novel, digital breakthroughs
2. Safety issues in teleconsultations
3. Need for PHC personnel continuous training on health digitalisation



Challenge 1: Strengthen citizens' health literacy to empower their active participation in healthcare, through safe utilisation of novel, digital breakthroughs

the importance of citizens' education regarding prescription-seeking behaviours was outlined, as the possibility of remotely prescribing routine pharmacological treatment cannot replace physical attendance with health professionals.

'As paperless, remote prescription is established, [patients] often think they no longer need to make an appointment and visit a physician. We should properly inform them, educate them, about how to use the newly implemented health services properly.' (FG-P2, GP)

'We should focus on using all capabilities that digitalisation, technology, e-health have offered us to enable patients to manage a lot on their own.' (I-P10, GP)

Challenge 2: Safety issues in teleconsultations

Health professionals were concerned about patient safety during teleconsultations, especially via phone, where no direct contact was the norm, and possibility of medical errors was increased

"There is a risk of missing something. You can miss things if you don't see the patients if you don't touch them." (I-P9, GP)



Challenge 3: Need for PHC personnel continuous training on health digitalisation

Opportunities for continuous staff training, on the newly introduced digital means, was proposed within strengthening the existing PHC workforce in the FGs

'Staff training opportunities should be provided to use the new digital means.' (FG-P8, Health Promotion Specialist)

Conclusions

- The pandemic signaled a turn in Greece's health system towards digitalisation and acted as a catalyst to tackle longstanding obstacles in implementing digital health tools.
- To progress towards future based on the lessons learnt, building on the pandemic-accelerated digitalisation, emphasizing on quality improvement and patient safety, promoting PHC professionals' continuing education and empowering patients by investing in health literacy could be key in building PHC resilience in the aftermath of the pandemic.