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**World Health  
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**GREECE**

# **NATIONAL DIGITAL REGISTRY OF COVID-19 PATIENTS**

## BACKGROUND

Digital health has been a national priority in Greece for several years, as thousands of islands in the Greek archipelago make the traditional form of medical care challenging. The digitalization of health care has the potential to significantly improve health-care delivery in Greece (Voutsidou, 2021).

In 2015 the National Council of e-Health Management was established to accelerate the progress of digital health policies in Greece. In addition, the National eHealth Interoperability Framework aims to support the management of health data and digital services, and to improve health-care delivery, governance and patient outcomes.



Following the COVID-19 pandemic, the Greek Government further accelerated its efforts to adopt digital solutions in response to the public health emergency.

## THE TECHNOLOGY



The national digital registry of COVID-19 patients was introduced in spring 2020 to facilitate epidemiological data collection. The registry aims to provide accurate data for evidence-based decision-making, improved coordination of health-care services and protection of the population. In addition, the tool offers telemedicine opportunities for confirmed COVID-19 patients isolating at home.

The registry collects the following data and indicators:

- COVID-19 incidence and admissions to hospitals;
- number of positive polymerase chain reaction (PCR)/rapid tests;
- epidemiological and medical records of patients; and
- disease and recovery monitoring indicators from admission to discharge using COVID-19 patient files in accordance with WHO guidelines.

The registry is a web-based platform connected to the nationwide citizen/refugee database, electronic prescription system, and hospital and health centres.

In summer 2020 remote prescribing through the electronic prescription system, which has been used in the country since 2012, was also established by law in Greece. Patients can choose to retrieve their prescriptions remotely through a text message on their mobile phone or via email.

# IMPACT

The registry has facilitated the collection of relevant data, including total and daily numbers of hospitalized patients, number of deaths, number of admissions to intensive care units, number of intubated patients, and outcomes. This has helped to:

- formulate therapy protocols in hospitals;
- monitor the status of health-care facilities;
- allocate resources;
- better coordinate and target health services and interventions;
- record epidemiological data;
- better plan future needs; and
- improve coordination among several governmental agencies.

Thanks to the registry, doctors have been able to follow their patients' progress through telemedicine service and to prescribe necessary medication.

*"The epidemiological surveillance of patients using the COVID-19 registry has helped us further rationalize cases for testing, address health-care needs and disparities, and increase quality and continuity of care."*

– Greek Ministry of Health

## KEY LEARNING

- **COVID-19 patients' contact with their doctors has been reduced and simplified thanks to teleconsultations. This experience can be translated into other disease areas, especially in remote and rural areas.**
- **The increased workload of health-care professionals during the pandemic has at times been a barrier to detailed and timely updating of the registry.**
- **The balance between public health needs and key European Union data protection principles can be further adjusted. For instance, current provisions allow data collected through the COVID-19 registry to be retained for 20 years after the individual's death (Vavoula, 2021). Introducing a temporal aspect to data retention would contribute to the registry's higher compliance with the General Data Protection Regulation (GDPR) by respecting the data minimization principle and increasing proportionality.**
- **Digital health applications must be user-friendly, and the confidentiality of the transmitted information and patients' personal data must be ensured. This approach helps to build public trust in the digitalization of health care.**

## MORE INFORMATION

COVID-19 information and actions in Greece (in Greek): <https://covid19.gov.gr>

Ministry of Health website (in Greek): <https://www.moh.gov.gr/>

National Public Health Organization (EODY) website: <https://eody.gov.gr/en>

## REFERENCES

Vavoula N (2021). The COVID-19 pandemic as a stress test on the right to protection of personal data. The case of Greece. *Eucrim*. 2:122–6. doi:10.30709/eucrim-2021-018.

Voutsidou S (2021). E-health applications for smart and pervasive healthcare in Greece. What can we expect? *IntechOpen*. doi:10.5772/intechopen.95859.