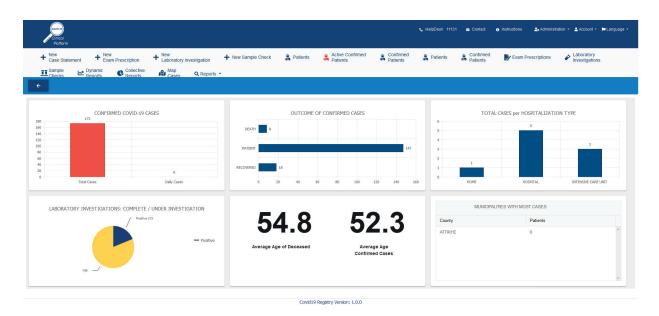


COVID-19 Clinical Platform: Effective Monitoring and Surveillance of pandemic spread



uring the coronavirus pandemic, real time monitoring and surveillance of coronavirus spread has been proved to be extremely important, as COVID-19 related health data enable health authorities and healthcare scientists to form state policies, for handling coronavirus disease and preventing the spread, providing patients with effective healthcare services.

Responding to this supreme need, **Sigmasoft** healthtech company successfully implemented an integrated system for monitoring the spread of COVID -19 and treatment of cases, the COVID-19 Clinical Platform. This **Cloud-based platform**, has set the foundations for a unique single point of reference for virus outbreaks, providing all the necessary information for healthcare system to tackle and combat the pandemic, with mandatory use of all healthcare providers nationwide.

The speed and effectiveness with which this Project was delivered to citizens, health professionals and state organizations - under the very adverse conditions of the pandemic - is a real success story, an example of what can be achieved with preparedness, professionalism and high expertise, for the benefit of society as a whole.

The COVID-19 Clinical Platform is monitoring the spread of COVID-19 and end-to-end treatment of cases including:

- Diagnosis of the incident in a hospital or COVID-19 mobile unit which performs sampling tests in specific population categories
- Case Management Monitoring upon first day of Admission to a Health Center
- PCR test order in the microbiological laboratory
- EMR system for monitoring & follow up of patients in Hospital/ICU/HDU, from admission to discharge
- Daily monitoring of patients' recovery in hospital, using a complete COVID-19 patient file, according to the World Health Organization (WHO) guidelines
- Remote monitoring of confirmed COVID-19 patients isolated at home, using a telemedicine platform



Through the platform, valuable information has entered the healthcare system, including:

- Patient Demographic Data
- Clinical Inclusion Criteria, based on signs and symptoms
- Vitals & Co-Morbidities Data
- Pre-Admission (chronic) & in ICU/HDU medication data
- Clinical Feature & Laboratory results
- Diagnostic testing results
- Patient outcome at heal or death report

All the above Data are protected, as the system is fully GDPR compliant and supports full audit trail capabilities. The platform has been closely reviewed by medical advisors in Greece and is fully compliant with all directives published by WHO, covering pre-admission, hospitalization, hospital discharge workflows, and indication monitoring for COVID-19 triage and monitoring processes.

A Ready-To-Use Integrated Platform for Every Hospital & Health Center

The system is available for fast track deployment for any hospital, health center, regional hospital group, or country regions, up to nationwide deployment, as implemented in Greece. Fast track deployment can be achieved upon standard functionality provided, and certain prerequisites applied. Multilanguage - localization module is available in more than 10 languages. The system can interoperate via standard API Patient Demographic module provided, to any nationwide/federal state governmental citizen/refugee database or Hospital HIS/EMR system for automatically retrieving patient demographic data. The system can also interoperate via standard API EU Health Insurance Database module provided, for business travelers or tourists from any of the 27 EU countries, with EU European Health Insurance Card Database. The Platform can interoperate via standard HL7/FHIR API module provided by any federal state or any nationwide eRX or EMR system, for retrieving patient records, which is extremely important on patient triaging or treating process.

Technologies used

- Typescript User Interface Powered by Microsoft
- Microsoft Power BI Intelligence Platform
- Microsoft Azure Ready!

Sigmasoft: The Greek healthtech leader

Founded in 2013, Sigmasoft is the Greek healthtech leader in Practice Management System software for private physicians and medical centers in Greece, with an existing customer base of 5.000 physicians nationwide. The software manufacturer has provided and still supports a white label solution of Practice Management System, for physicians & health centers in Greece on behalf of a top listed 500 Fortune US based company, global provider of advanced analytics, technology solutions and contract research services to the Life Sciences Industry, with presence in more than 60 countries and over 65.000 employees around the world. Sigmasoft is also accredited with ISO 9001:2015, ISO/IEC 27001:2013, ISO/IEC 27799:2016

Sigmasoft has high expertise in:

> e - Health

> e - Government

> e - Procurement

HRMS (Public - Private Sector)

> ERP

> CRM