COVID-19 Dashboard for the Lisbon Region - an advisory tool for policy

Patrícia Pita Ferreira

PP Ferreira^{1,2}, R Martins¹, DP Tavares², J Valente²

¹ACeS North West, Lisbon and Tagus Valley Regional Health Administration, Caldas da Rainha, Portugal

²Public Health Department, Lisbon and Tagus Valley Regional Health Administration, Lisbon, Portugal
Contact: ppita.ferreira@gmail.com

Issue/problem:

At the time of arrival of the COVID-19 pandemic to Portugal, the Public Health Department of Lisbon and Tagus Valley Regional Health Administration was confronted with its obsolete information system, which could not provide the information that Public Health Authorities needed to bring the pandemic under control. In order to tackle this issue, our goal was to aggregate all the relevant epidemiological data for the region in an accessible and user-friendly dashboard.

Methods:

Starting from March 2020 we created a dashboard, which compiled and analyzed COVID-19 data, such as: confirmed and active cases, deaths, hospitalizations (including ICU beds), high/low risk contacts, mandatory confinements, tests, and clusters. This dashboard had anonymized data and was updated daily as well as constantly upgraded by taking into consideration new incoming data and feedback provided by users, serving its purpose as an advisory tool for policy.

Results:

The dashboard was available to Local, Regional, and National Public Health Authorities and made possible to monitor trends and predict epidemiological changes that, prior to its existence, were dispersed in several datasets. Most importantly, it allowed for a better allocation of human resources for contact tracing and case management activities, to easily identify basic social needs for the most vulnerable citizens. It also provided for policy measures adjusted to the smallest administrative division in Portugal, the parish, that ultimately allowed for a better epidemiological control in Lisbon Metropolitan Area in 2020.

Lessons:

The regional dashboard is far from perfect, but it highlights the constant need for robust information and epidemiological surveillance systems, serving both National, Regional and Local Public Health Authorities. It appeared out of necessity during a pandemic and it proved once more the importance of data analytics for guiding public health action based on evidence.

Key messages:

- Data analytics can serve both as an advisory tool for policy as well as to guide public health interventions.
- The COVID-19 Dashboard for the Lisbon Region aggregates relevant epidemiological data that helped Public Health authorities better understand and control the Pandemic in the region.