

Results:

In the Lombardy region on the 20th of February the number of the first aid requests for respiratory and/or infectious episodes were 314. This figure increased sharply during the month of February and March reaching its peak on the 16th of March with 1537 episodes. In the area around Bergamo, this number experienced a greater rise compared to the rest of the Lombardy territory, going from 74 episodes on the 20th of February to 694 on the 13th of March. Therefore, AREU decided to reallocate in the territory the resources (ambulances and human resources) based on the real-time data elaborated by the BI system.

Conclusions:

The BI System has been of paramount importance in taking timely decisions on the management of EMS during the COVID-19 outbreak in the Lombardy region. Indeed, BI can be usefully applied to promptly identify the trend of the COVID-19 epidemic and, consequently, make informed decisions to improve the response to the outbreak.

Key messages:

- The Emergency Medical Services Trust of the Lombardy region applied a Business Intelligence System to promptly respond to the outbreak of COVID-19 and reallocate the resources based on real-time data.
- AREU used a Business Intelligence System to track the daily number of first aid requests that have been classified as respiratory and/or infectious episodes during the telephone dispatch interview.

Management of Emergency Services in Lombardy during COVID-19 epidemic using Business Intelligence

Aurea Oradini Alacreu

GM Sechi¹, M Migliori¹, G Dassi¹, A Pagliosa¹, R Bonora¹, A Oradini-Alacreu², A Odone², C Signorelli², A Zoli¹

¹Azienda Regionale Emergenza Urgenza, Regione Lombardia, Milan, Italy

²School of Public Health, Faculty of Medicine, Vita-Salute San Raffaele University, Milan, Italy

Contact: oraauri@hotmail.com

Background:

In Italy on the 20th of February, the first Italian patient was tested positive for Coronavirus Disease 2019 (COVID-19) in the Lombardy region. The Regional Emergency Medical Services (EMS) Trust (Azienda Regionale Emergenza Urgenza, AREU) of the Lombardy region decided to apply a Business Intelligence (BI) System to take timely decisions on the management of EMS and to monitor the spread of the disease in the region in order to better respond to the outbreak.

Methods:

Since the beginning of the COVID-19 outbreak, AREU developed a BI System to track the daily number of first aid requests received from 1.1.2. (Public Safety Answering Point 1). BI evaluates the number of requests that have been classified as respiratory and/or infectious episodes during the telephone dispatch interview. Moreover, BI analyses the pattern of the epidemic, identifying the numerical trend of episodes in each municipality (increasing, stable, decreasing). Currently, AREU is still implementing the BI as the epidemic is still ongoing.