CAPSTONE PROJECT

An Overview of Healthcare System Capacity for Covid-19 Pandemic at Orange County, California, U.S.A

INTRODUCTION

The novel coronavirus (COVID-19) outbreak has been sweeping the United States like explosive wildfires and infected more than 1 million people as of April 27th, 2020. As the public be informed by the news coming out of New York City, a growing number of infected patients has overwhelmed the healthcare system. Not mention the frontline health workers have to work non-stop to treat patients, but they are facing the shortage of personal protection equipment (PPE) to protect themselves properly.

All states have been enforcing "social distancing" and "stay home order" to flatten the curve for the COVID-19 development. Flattening the curve simply means that we all have to do our part to help healthcare system function within its capacity.

As a resident in Orange County, California, I would like to know if the medical resources are sufficient enough to support the community. By evaluating the number of local hospitals and existing COVID-19 patients, I will be able to perceive the general picture of the healthcare system preparedness in this area.

DATA

The statistics I refer to is "Covid-19 Case Counts by Cities" from the orange county government website. The dataset contains the names of the cities in orange county, populations, and total diagonalized cases in each city. In addition, I will use Foursqure geolocation data to find local hospitals. Combining the two datasets allows me to observe the distribution of medical responses and thus find out if the healthcare system is functioning properly in Orange County.