

Hospital Bed Capacity and COVID-19

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The dataset from ProPublica titled “Hospital Bed Capacity and COVID-19” shows hospital bed and ICU bed data for different hospitals across the country. The dataset predicts whether there are enough hospital and ICU beds for patients infected with COVID-19 requiring hospitalization. These values are computed for 6, 12 and 18 months into the pandemic. The researchers quantified the hospital and ICU bed capacity based on if 20%, 40% and 60% of the population became infected with COVID-19. Patients needing hospitalization or ICU care were estimated, along with those that are over the age of 65.

The categorical data will be whether or not the hospital has enough bed capacity to accommodate the projected individuals require hospitalization. This is a yes or no factor based on the percentage of available beds needed. A percentage over 100% demonstrates that there will not be enough hospital beds in the projected timeframe for the patients needing them. Factors affecting this data will include the percent of the population infected, the age of the patient, whether the patient requires hospitalization, and the hospital capacity.

The CDC has similar data on their website showing percent occupancy of hospital and ICU beds on a daily basis during the timeframe of April 1 to July 14 [1]. This data gives an accurate daily count and is not a prediction for hospital capacity in the future. It would be interesting to compare this to the ProPublica data to determine if the prediction is correct. Another website that shows a projection of hospital bed use among the entire United States is IHME. This data shows a prediction up to January 1, 2021 of the hospital and ICU beds that will be used [2]. However, the data only shows the number of beds used, not the percentage. Additionally, it does not break the data into locations, it only shows the entire country.

References

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