

This dataset, provided by U.S. Department of Health & Human Services, includes Covid-19 impact on metrics such as number of hospital admissions, bed utilization rates, average length of stay, and possibly other similar indicators of hospital utilization at the state level.

| Name | Definition | Data type | Possible values | Required? |
|--------------------------------------|---|-----------|------------------|-----------|
| State | Name of the state | char | NC, NY, VA,... | Yes |
| critical_staffing_shortage_today_no | Number of hospitals reporting as not having a critical staffing shortage today in this state. | integer | 150, 1, 2 | Yes |
| critical_staffing_shortage_today_yes | Number of hospitals reporting a critical staffing shortage today in this state. | integer | 150, 1, 2 | Yes |
| inpatient_beds | Reported total number of staffed inpatient beds including all overflow and surge/expansion beds used for inpatients (includes all ICU beds) in this state | integer | 53499, 1112, 132 | Yes |
| inpatient_beds_used_covid | Reported patients currently hospitalized in an inpatient bed who have suspected or | integer | 213,1321,132 | Yes |

| | | | | |
|---------------------|--|---------|--------------|----|
| | confirmed COVID-19 in this state | | | |
| inpatient_beds_used | Reported total number of staffed inpatient beds that are occupied in this state | integer | 1231,324,132 | No |

This dataset can be merged with the primary COVID-19 dataset by using the state variable which represents the name of the state. By using this state variable, we can use the total Covid-19 cases, deaths per state and merge it with this hospital dataset to see the impact of Covid-19 on hospitals.

After looking at this dataset, I wanted to analyze the correlation between:

- Covid-19 cases and hospital beds availability:
 - o Does increase in Covid-19 cases cause decrease in hospital beds availability?
 - o How much of the hospital beds are occupied by Covid-19 patients?
- Covid-19 deaths and the availability of hospital beds and the critical staffing shortage on that date
 - o Is decrease in hospital beds availability related to increase in Covid-19 deaths?
 - o Is shortage in critical staffing correlated to increase in Covid-19 deaths?