



# COVID-19 Hospitalization Rates by County

# COVID-19 Impact

- 3+ Million people dead
- Worldwide Pandemic
- Shortages in medical care, as a result





# Problem: Hospitals Overcrowded

- Rising COVID cases and severity of symptoms have led to sharp increases in hospital admittance.



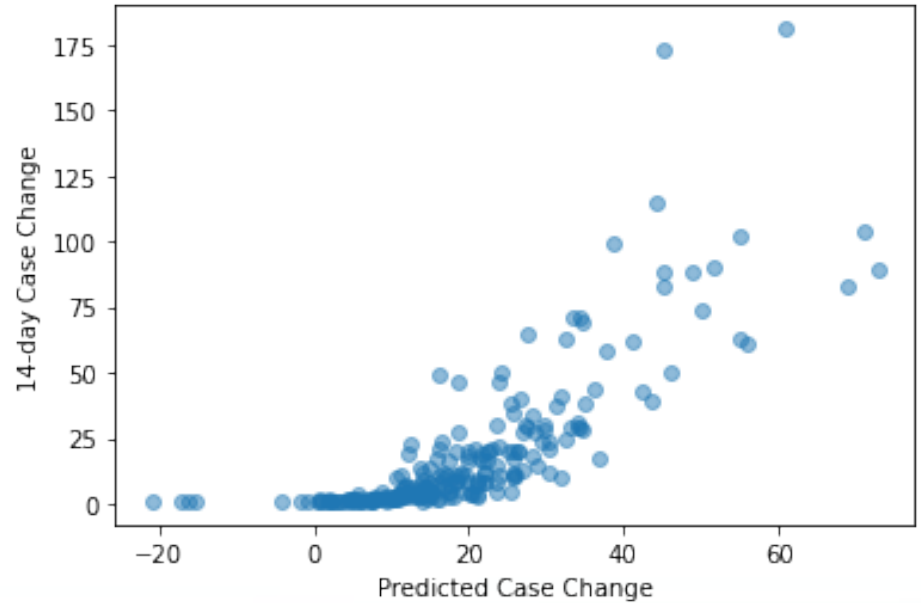
# Approach

- Using New York Times Coverage of COVID-19
- Provides County-by-County data
- Features: hospitalization and vaccination rates
- Predicting Daily Case Change

**The New York Times**

# Model

- The prediction and test values look almost exponential.
- Models' performance fluctuated
- Chose ridge regression



# Results

- Some predicted values for counties across the US.
- Mean: +21.1
- Std. Dev: 19.4

	County	Predicted Values
169	Beauregard ›	7.721367
560	Clay ›	13.741028
2737	Stanislaus ›	21.243127
2601	Schoharie ›	21.856274
3144	Windham ›	32.225697
...	...	...
1509	Karnes ›	27.036604
2798	Surry ›	20.115516
2207	Osceola ›	36.426632
2089	Napa ›	33.092712
150	Barry ›	17.967755