

I am interested in healthcare and learning more about policies and existing systems in America. For this assignment, I chose to visualize a set of data describing all American hospitals from 2011. I thought it would be interesting to view larger trends first (eg state-wide) and then see if they were caused by any differences in individual hospitals. The dataset included variables about costs, types of procedures performed, and numbers of hospitals. I used this, along with a dataset of population per state, to make comparisons about the number of hospitals and populations. I was actually surprised by how well they mapped together.

I used most popular procedure per state to determine differences among states, and also to see if this was caused by an outlier in the hospital level. New York had far more major joint replacements done as compared to any other state. Their Hospital for Special Surgery is responsible for this, performing more joint replacements than any other hospital, and more four times as many total joint replacements in 2011 as compared to any other procedure at any other hospital in New York. They are clearly a powerhouse for their specialty.

Another interesting piece that I discovered from this dataset was Maryland's cost structure, which is significantly cheaper than other states. Some digging led me to discover they use a unique "all-payer" rate setting model, which allows them to keep costs low.

In terms of design, I thought it would be useful to use bar charts purely because they helped the page load faster. I wanted to use dots at first to represent every procedure performed in every state, but this was barely usable. Another reason I used bar charts was the fact that this was a narrative visualization. The user does not need to have as much exploratory abilities in this style.

Going forward, I think it would be worth exploring why some states bucked the trend of major joint replacements being the most popular state-wide procedure. For example, why is it esophagitis for Florida or Alcohol/Drug dependence treatment for Massachusetts?

Overall, I enjoyed this assignment because I learned something as well.