To visualize the HCUP dataset, I used an online resource called openheatmap which takes a csv as input and overlays the data onto a map of the United States. Openheatmap also allows hovering over each county to display the value for that county. The hardest part of using this service was that the csv needed to be formatted such that state\_code, and county\_code mapped to a numerical value. This was difficult because the HCUP data only had state name and county name with no state\_code or county\_code. To get everything formatted correctly I had to download a csv that mapped state abbreviations and county names to county codes and another csv file that mapped state names to state abbreviations to get the correct mapping from county code to value. Once this was done it was very easy to parse the individual lines of HCUP data, take the average of each category and then put into a csv that could be put into the openheatmap. A csv of this form was created for each column of the HCUP data and individually put into a map to make visualizing the differences very easy. Then each of these maps were combined into one html file with labels so all of the interactive maps could be seen together.