IEMS 308 Project 1 Executive Summary

The experiment I decided to perform on this Medicare data was to look at the geographic differences in Medicare coverage across the United States by examining the ratio of out of pocket costs to Medicare approved cost of procedure and the ratio of Medicare approved cost to amount requested per procedure. I examined 350 facilities in each state, D.C. and Puerto Rico and clustered them into four separate clusters based on these factors. When looking at the four clusters the more exorbitant the requests by the facility, the less of the cost of procedure Medicare would cover. This result also holds when looking at individual datapoints. When comparing the cluster results by state to average Medicare spending per capita and Obamacare Medicare expansion adoption by state, the results were not what one would expect based on funding. Most of the states with the highest percentage of facilities in the two clusters with the best coverage had significantly lower Medicare spending per capita and hadn’t opted into Obamacare Medicare expansion. This would lead me to believe that Medicare in these states is being run much more efficiently, possibly due to the more accurate requests for funding that these states had. Perhaps other states could use to study Medicare operations in these states to improve their efficiency. A very notable result was that around 90% of Puerto Rican facilities were in the worst covered cluster, likely due to the different Medicare funding treatment of U.S. territories that allows a set nonflexible amount of funding and leaves the rest of the expenses to be handled by Puerto Rico. This treatment was a major cause of Puerto Rico’s recent bankruptcy and these results only reinforce the fact that Medicare reform for the U.S. territories is sorely needed.