

STATS 506 Final Project Proposal

Yufan Li

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1 Research Question

Are ZIP codes with higher AGI levels more likely to have services provided in facility settings compared to non-facility settings?

2 Analysis Plan

This project aims to investigate whether ZIP codes with higher Adjusted Gross Income (AGI) levels are more likely to have Medicare services provided in facility settings compared to non-facility settings. By merging "Medicare Physician and Other Practitioners - by Provider and Service" and "IRS SOI tax statistics" data sets by ZIP code in the year of 2020, I will examine socioeconomic patterns in healthcare service locations. First, I will prepare the data by calculating the proportion of services provided in facility settings for each ZIP code and summarizing AGI levels and facility service proportions across income quartiles. I will then analyze the relationship between AGI and facility service use through correlation and regression analysis, controlling for factors such as the number of Medicare beneficiaries and total services in each ZIP code. Scatter plots and box plots will help visualize these patterns, and geographic maps may reveal regional trends. The results will be evaluated to determine if income significantly predicts the likelihood of facility-based services, offering insights into potential socioeconomic disparities in healthcare access and service settings.