

Executive Summary

Team AlgoRhythm chose to focus on the health insurance industry. First, to better understand the distribution of the insured, we will use Small Area Health Insurance Estimates (SAHIE) API data to explore the question: What percent of each county in the U.S. has health insurance? Next, we will explore the question: How do disability and health status affect out-of-pocket expenses for the insured? Using 2021 Current Population Survey Annual Social and Economic Supplement (ASEC) data, we will run a machine-learning (ML) clustering algorithm to categorize the data by disability and health status. Finally, we will explore the question: How do socioeconomic factors affect the value of out-of-pocket expenses for the insured? Using the clusters created from the 2021 ASEC data, we will run a ML algorithm to answer this question. Specifically, we will examine the following: How does age affect out-of-pocket expenses? How does race/ethnicity affect your out-of-pocket expenses? How does income affect out-of-pocket expenses? Does gender play any role in out-of-pocket expenses?