**Healthcare Costs and Demographics: Do Population**

**Demographics Affect Healthcare Costs?**

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**Project Description:**

The purpose of this project is to use Python, Pandas, and Matplotlib to explore whether there is a relationship between healthcare costs in California and median age, income per capita and population.

**Scope of Research:**

This was carried out by accessing the both the Census API as well as Centers for Medicare and Medicaid Services. The Census provided data in regard to median age, income per capita and population, this data was filtered to only look at zip codes specifically in California. Centers for Medicare and Medicaid Services provided a dataset which included specific medical procedures, where they were conducted and the average total payments. The top 5 procedures across the state of California were used to test the following hypotheses.

**Hypotheses:**

1. If there is a relationship between cost of healthcare and population, there will be higher healthcare costs in areas with higher population.
2. If there is a relationship between cost of healthcare and income per capita, there will be higher healthcare costs in areas with higher income per capita.
3. If there is a relationship between cost of healthcare and median age, there will be higher healthcare costs in areas with higher median age.

**Hypothesis 1**

If there is a relationship between cost of healthcare and population, there will be higher healthcare costs in areas with higher population.

**Hypothesis 2**

If there is a relationship between cost of healthcare and income per capita, there will be higher healthcare costs in areas with higher income per capita.

**Hypothesis 3**

If there is a relationship between cost of healthcare and median age, there will be higher healthcare costs in areas with higher median age.