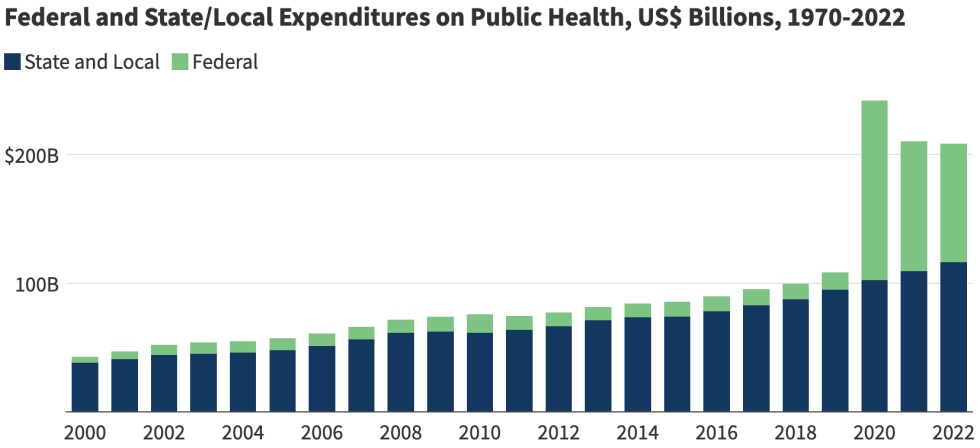
Medical Inflation? Post-Pandemic Healthcare Expenditures
CS3 Case Study - DS 4002 (Spring 2025)
By: Camila Gutierrez
Github: https://github.com/camigutie/DS4002-CS3/tree/main



In 2023, the average American spent $14,570 on healthcare–total healthcare spending accounts for around 18 percent of the total GDP [1]. Healthcare costs have steadily increased over the past decades, with health crises such as COVID-19 driving increased costs. Out-of-pocket spending on healthcare has also increased, with more than half of Americans worrying about being able to afford healthcare [2].

The headline Consumer Price Index (CPI) measures inflation by tracking changes in the price of a basket of goods and services, including food, transportation, and healthcare. Medical care CPI specifically tracks the cost of healthcare goods and services, such as hospital visits, prescription drugs, and insurance premiums [1]. Because medical care CPI only tracks these out-of-pocket expenses, the healthcare spending price index provides a clearer picture of how the country's healthcare spending overall has changed over time [2]. When governments attempt to account for this constant inflation within the healthcare sector, it can be hard for them to adjust budgets and government programs properly, as they tend to make decisions based on the headline CPI, which underestimates the true growth rate of healthcare costs.

For much of the past 75 years, medical care CPI has trended higher than headline CPI, shaping economic policy and household financial stability, especially during economic shocks. Unlike general inflation, which fluctuates sharply in response to economic cycles, medical care inflation has remained relatively steady—even during recessions–due to the inelastic demand for healthcare services. [3]

In this scenario, you are a policymaker interested in studying historical and future trends in medical care inflation. With ARIMA forecasting, you will provide a structured analysis of how medical care inflation impacts overall price changes and how that might affect future healthcare expenditures. This is critical, as the inflation rate of medical care, specifically out-of-pocket expenses, often shapes national budget policy.

References:

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