

Medication Adherence: Introduction



Critical Importance

Medication adherence is essential for patient health outcomes and cost management.



Analysis Highlights

Explored demographic factors such as gender, age, and financial contributions.



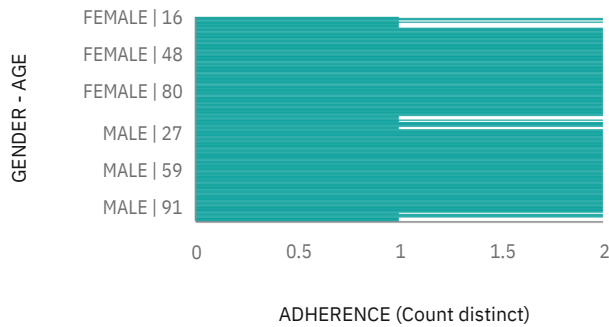
Goals

Identify adherence patterns to guide targeted interventions.

Medication adherence is a critical factor in patient health outcomes and healthcare costs. For this analysis, we explored demographic factors that correlate with adherence and non-adherence behaviors, as well as their financial implications. By examining trends across gender, age, and financial contributions, this project highlights key insights into how adherence impacts both individual and system-wide healthcare metrics. The goal is to identify patterns that could inform targeted interventions to improve adherence rates and reduce unnecessary expenses.

DATA INSIGHTS: ADHERENCE

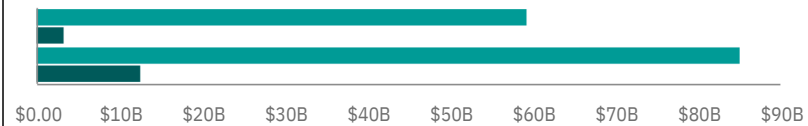
Medication Adherence Trends by Gender and Age



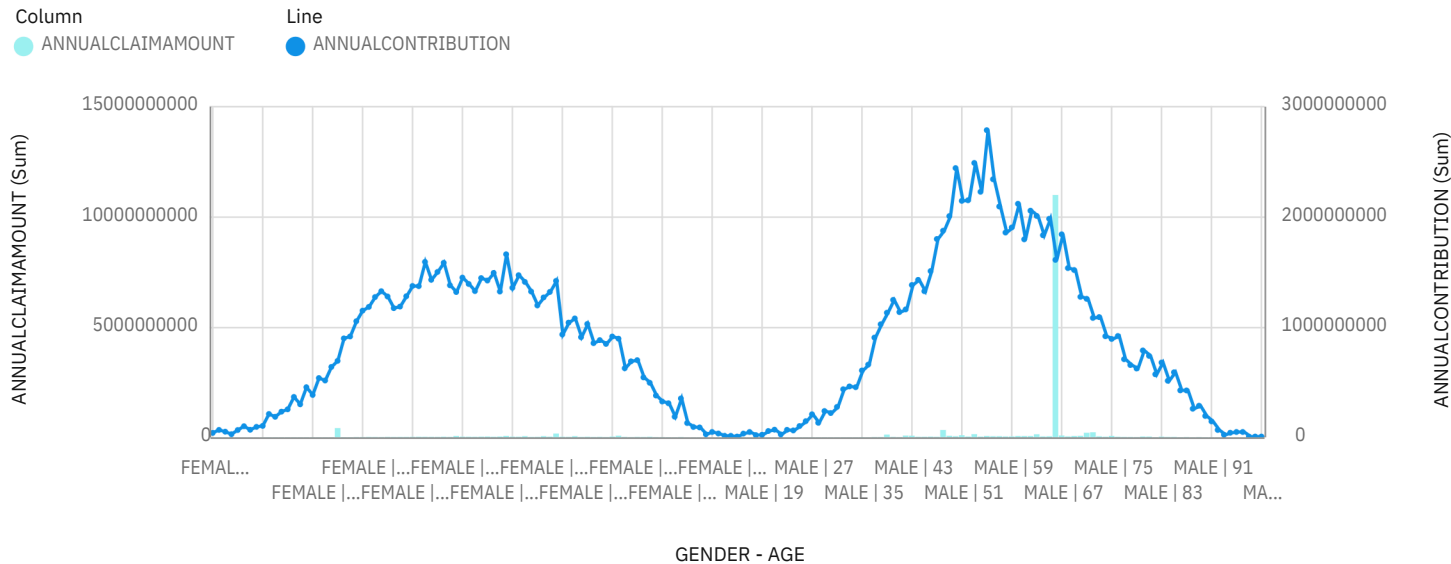
Total Units of Medication by Adherence Status



Financial Impact of Adherence: Contributions vs. Claims



Annual Financial Trends by Gender and Age



1. What demographic factors correlate with medication adherence?

We can see from the surrounding graphs that gender does not play a role in adherence, but age does. Young adults (16yo - 25yo) and the elderly (93yo - 103yo) tend not to take their medications as prescribed.

2. The non-adherence makes us question how young adults and elderly patients from our dataset misused their medication.

From this bar chart, we can see that they took more than prescribed. Not only did those who were non-adherent take more medication, they also spent and claimed more on their plans. You can see the annual contribution and annual claim amount is far higher than the group who stayed adherent to their medications and routine.

3. Now that we are discussing money, I want to refer back to our demographics and see how that relates to the amount spent on annual contributions and how much was claimed.

Our male demographic aged between 50 to 60 years of age is higher than other demographics for annual contribution and annual claim amount.

Medication Adherence: Conclusion



Key Findings

Non-adherence rates are highest among young adults and the elderly.



Financial Impact

Male patients aged 50-60 show the highest financial burden.



Call to Action

Tailored programs are critical to improving adherence and managing costs.

Our analysis reveals that medication adherence varies significantly by age, with young adults and the elderly demonstrating higher rates of non-adherence. This non-adherence correlates with increased medication use and higher healthcare costs, as seen in both annual contributions and claims. Additionally, male patients aged 50-60 showed the highest financial impact across all demographics, underscoring the need for tailored adherence programs for this group. These findings emphasize the importance of addressing adherence behavior to improve patient outcomes and manage healthcare expenses more effectively.