

A Retrospective Study of SGLT-2 Inhibitors Prescription Disparities and Affordability Among Medicare Patients with Diabetes

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Major Takeaway:

- Black, female, and low-income were associated with lower rates of SGLT-2 inhibitor use among T2D patients with cardiovascular diseases.
- Black patients, on average, received \$69 less in Medicare spending compared to non-Black patients.

Introduction

- Although SGLT-2 inhibitors are covered by Medicare Part D and commercial insurance plans, their adoption rates are slower among Black and female patients compared to their White and male counterparts.
- Medicare beneficiaries generally have lower usage rates of SGLT-2 inhibitors compared to those with commercial insurance.
- This study focuses on investigating the inequalities in SGLT-2 inhibitor use among Medicare patients with type 2 diabetes (T2D), based on demographic and socioeconomic factors, and their impact on overall Medicare spending on diabetes

Method

- T2D patients with cardiovascular diseases from outpatient care between 2017 to 2021 were identified using **100% Medicare RIF files**.
- The study examined **3,582,770** Medicare beneficiaries with T2D and cardiovascular diseases to evaluate SGLT-2 inhibitor use and its effect on Medicare spending.
- Multivariate linear and logistic regression** analyses were employed to investigate the influence of demographic and socioeconomic variables on SGLT-2 inhibitor use and Medicare spending.

Objective

The objective of this retrospective study is to investigate prescription disparities and affordability of SGLT-2 inhibitors among Medicare patients with type 2 diabetes, and to examine the impact of demographic and socioeconomic factors on overall Medicare spending. The study aims to provide insights into potential interventions that could improve the usage rates of SGLT-2 inhibitors and reduce disparities in cardiovascular outcomes among Medicare patients.

Figures

Figure 1: The trends in SGLT-2 inhibitor use by gender from 2017 to 2021.

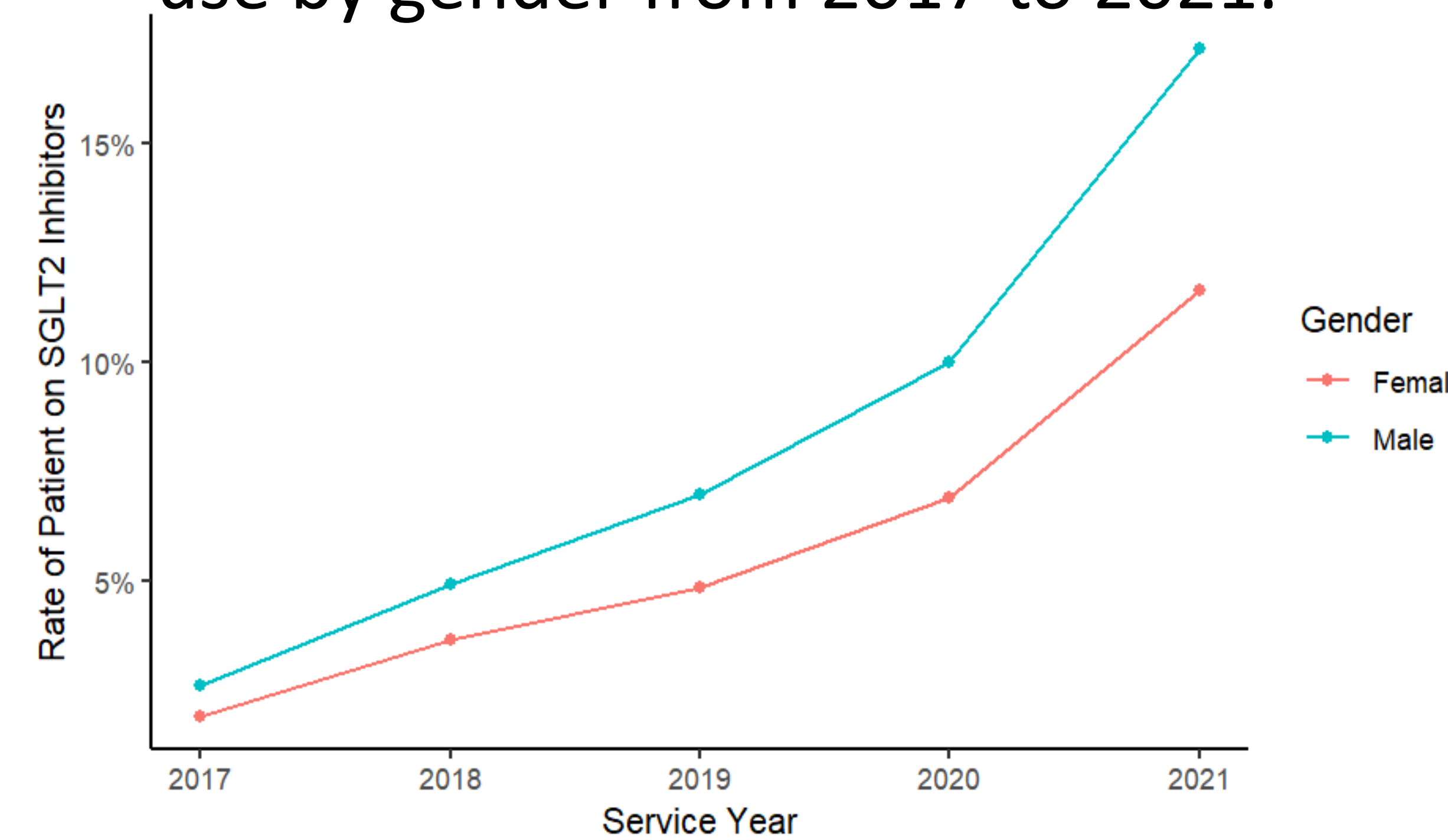


Figure 2: The trends in SGLT-2 inhibitor use by race from 2017 to 2021.

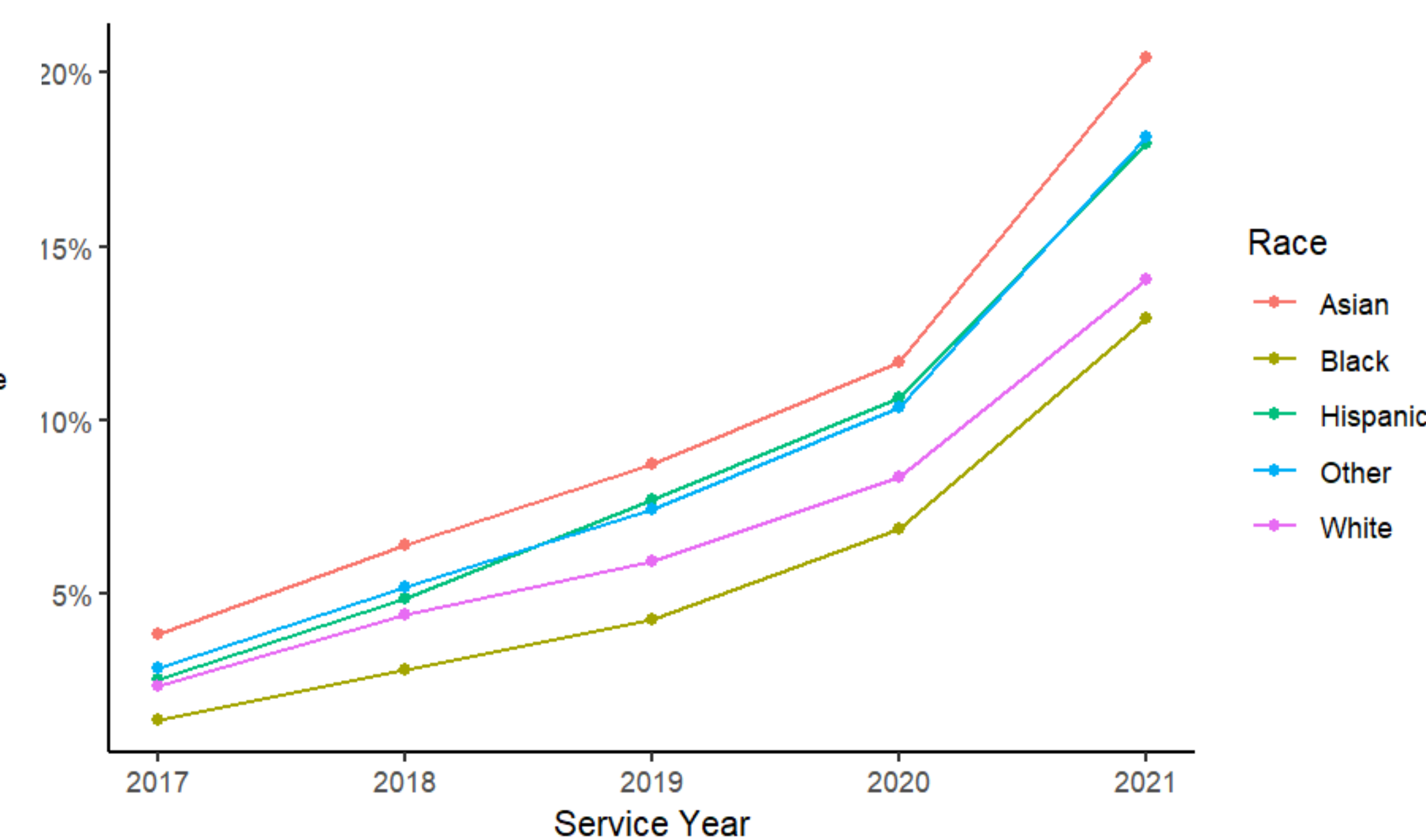


Figure 3: Medicare spending of SGLT-2 inhibitor use by Black Patient

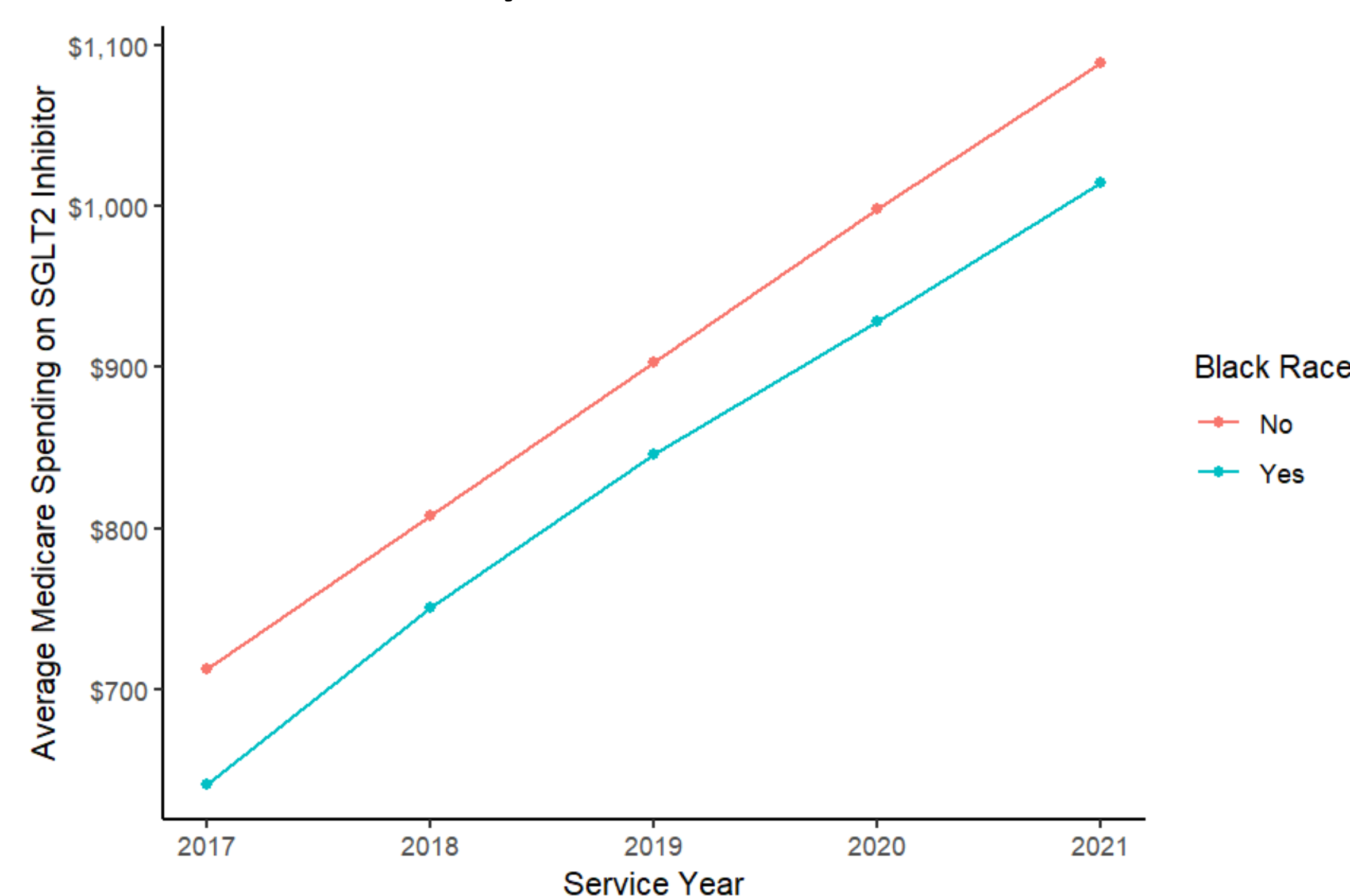
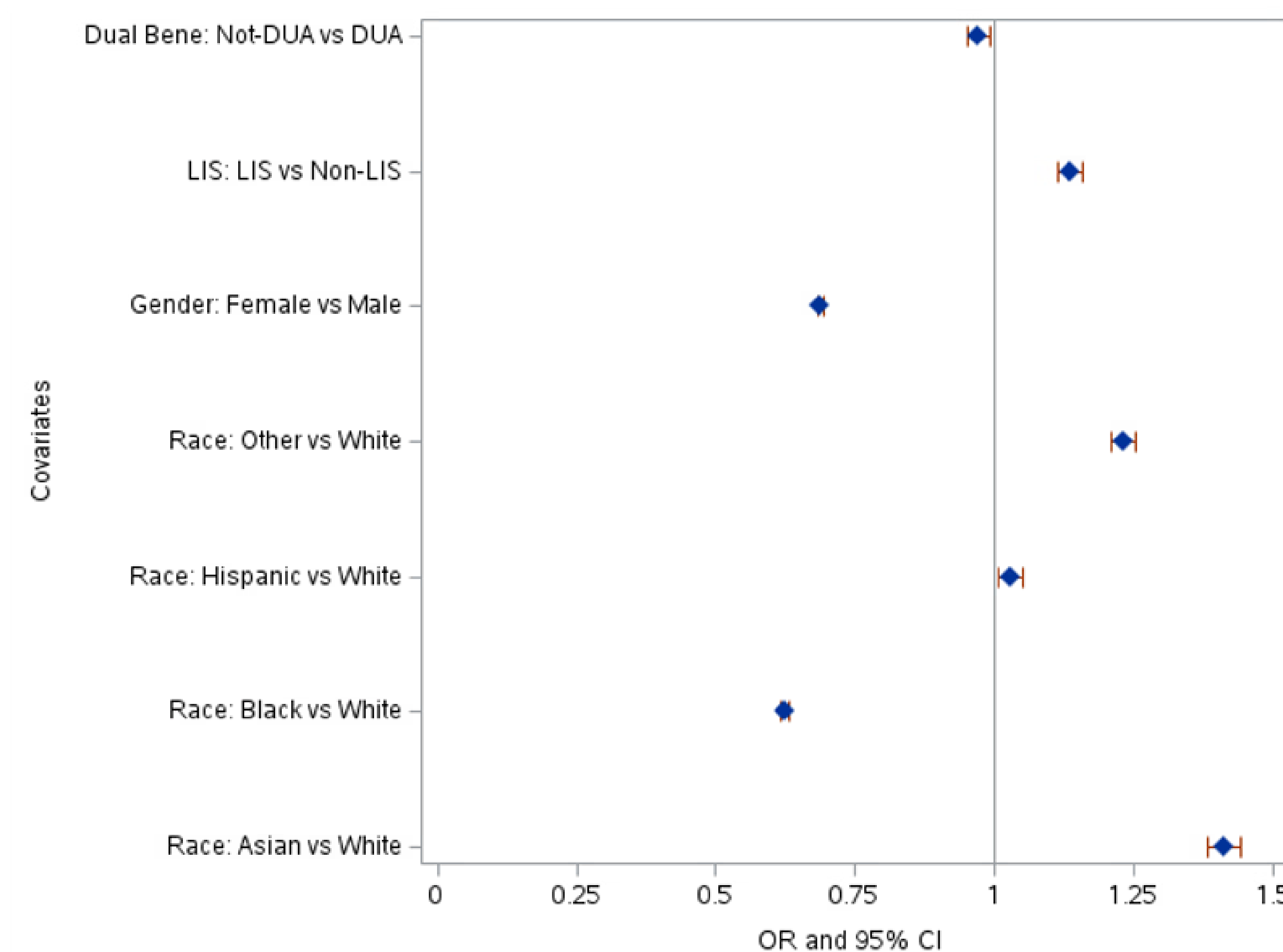


Figure 4: Logistic Regression Output



Results

- Black T2D patients had lower SGLT-2 inhibitor usage rate compared to White patients (3.4% vs 5.2%).
- Being female and receiving low-income subsidy were associated with lower SGLT-2 inhibitor usage rates.
- Multivariate regression analyses showed Black, female, and low-income subsidy patient were independently associated with lower SGLT-2 inhibitor use.
- On average, Black patients received \$69 less in Medicare spending compared to non-Black patients.

Conclusion

- The study highlights the disparities in SGLT-2 inhibitor usage rates among Medicare patients with T2D and major cardiovascular outcomes.
- These findings can inform targeted interventions to improve SGLT-2 inhibitor usage rates among Medicare patient populations, which could significantly improve cardiovascular outcomes.
- Although SGLT-2 inhibitors reduce hospitalizations and mortality, usage rates for Medicare T2D patients with major cardiovascular outcomes, especially Black females and low-income patients, are low.

Implication

The study highlights disparities in SGLT-2 inhibitor usage rates among Medicare patients with type 2 diabetes and major cardiovascular outcomes, particularly among Black females and low-income patients. Targeted interventions can improve usage rates and improve cardiovascular outcomes. Expanding the use of SGLT-2 inhibitors in this population could have significant benefits.

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