



UNIVERSITY *of* MARYLAND
SCHOOL OF PHARMACY

Conflicts of Interest:

The authors of this study declare no conflict of interest with the content of this presentation.



UNIVERSITY *of* MARYLAND
SCHOOL OF PHARMACY

Utilization and Spending Trends in Medicare Part D Antidiabetic drugs, 2015-2019

Farideh Sistani, Fadia T. Shaya, Magaly Rodriguez de Bittner
University of Maryland School of Pharmacy

Introduction

- Significant cost burden of diabetes
- Prevalent among Medicare beneficiaries
- No previous study on trends in Medicare Part D spending and utilization

Objectives

- To highlight the substantial financial burden of diabetes
- To demonstrate trends in spending and utilization between 2015 and 2019
- To illustrate the antidiabetic market share in terms of spending

Methods

- Medicare Drug Spending Dashboard and utilization dataset (2015-2019)
- 10 common classes of antidiabetics
- Adjusting spending for the inflation
- No need for institutional review board approval

Results

- 16% of Medicare Part D spending on all drugs
- 56% increase in spending

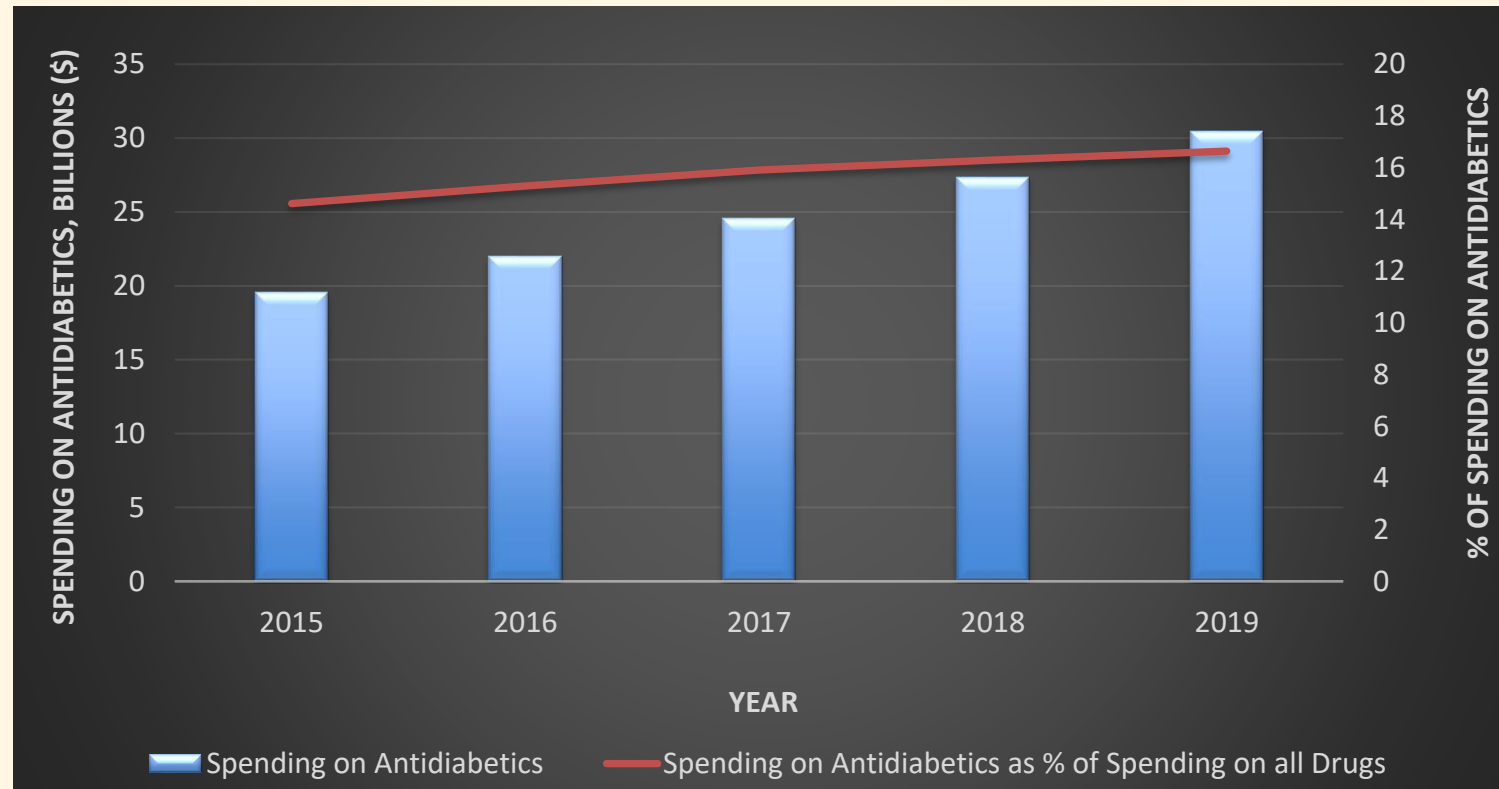


Figure 1. Trend of Overall Medicare Part D Spending on Antidiabetics from 2015 to 2019

Question 1

What percent of total Medicare Part D spending between 2015 and 2019 was on antidiabetic medications?

- a) 56%
- b) 16%
- c) 12%
- d) None of the above

Results

- 95% of total expenditure on single agents
- 55% and 71% growth in expenditures for single and combination agents, respectively

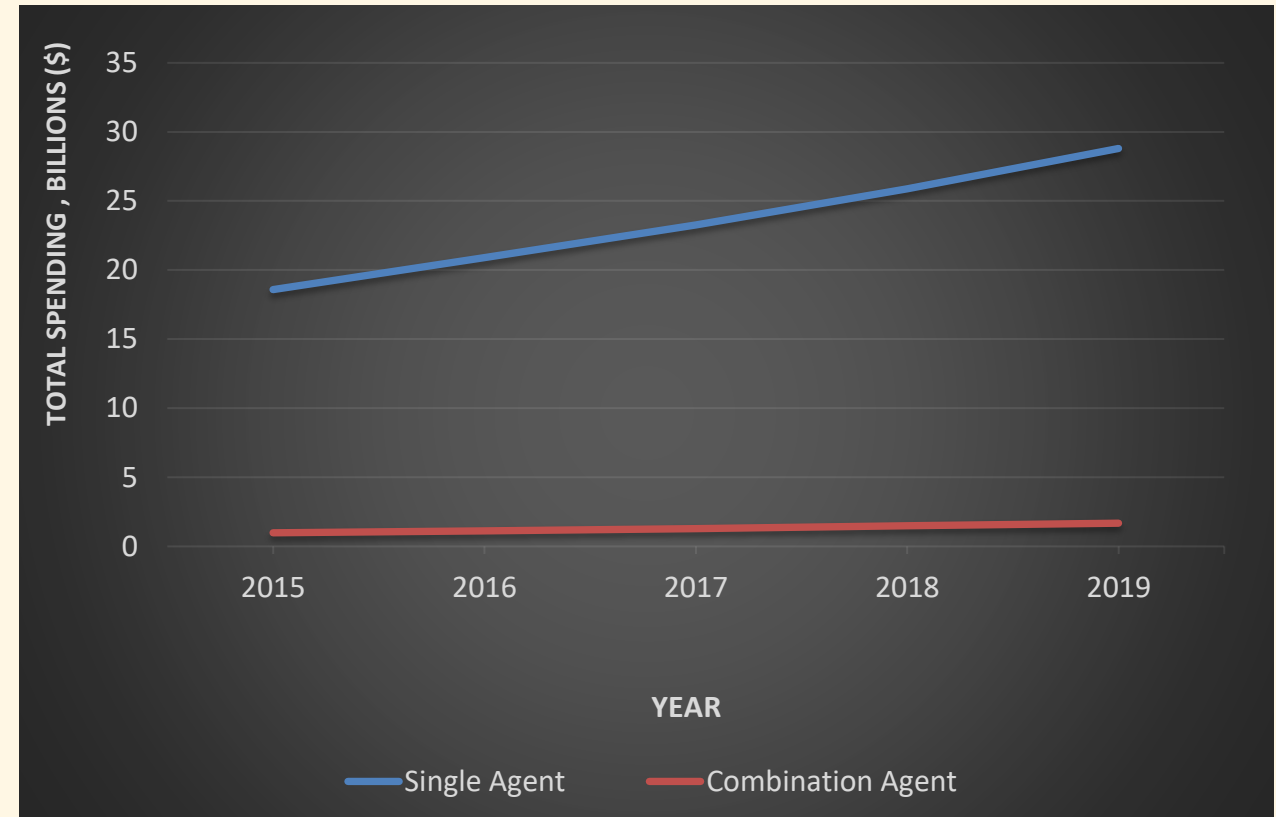


Figure 2. Trend of Total Spending Per Type of Antidiabetic

Results

- 57% of spending per year on insulin
- Majority of spending on non-insulin antidiabetics: DPP4i, GLP-1 RA, SGLT2i, and DPP-4i-Metformin
- Less than 3% of spending on other classes

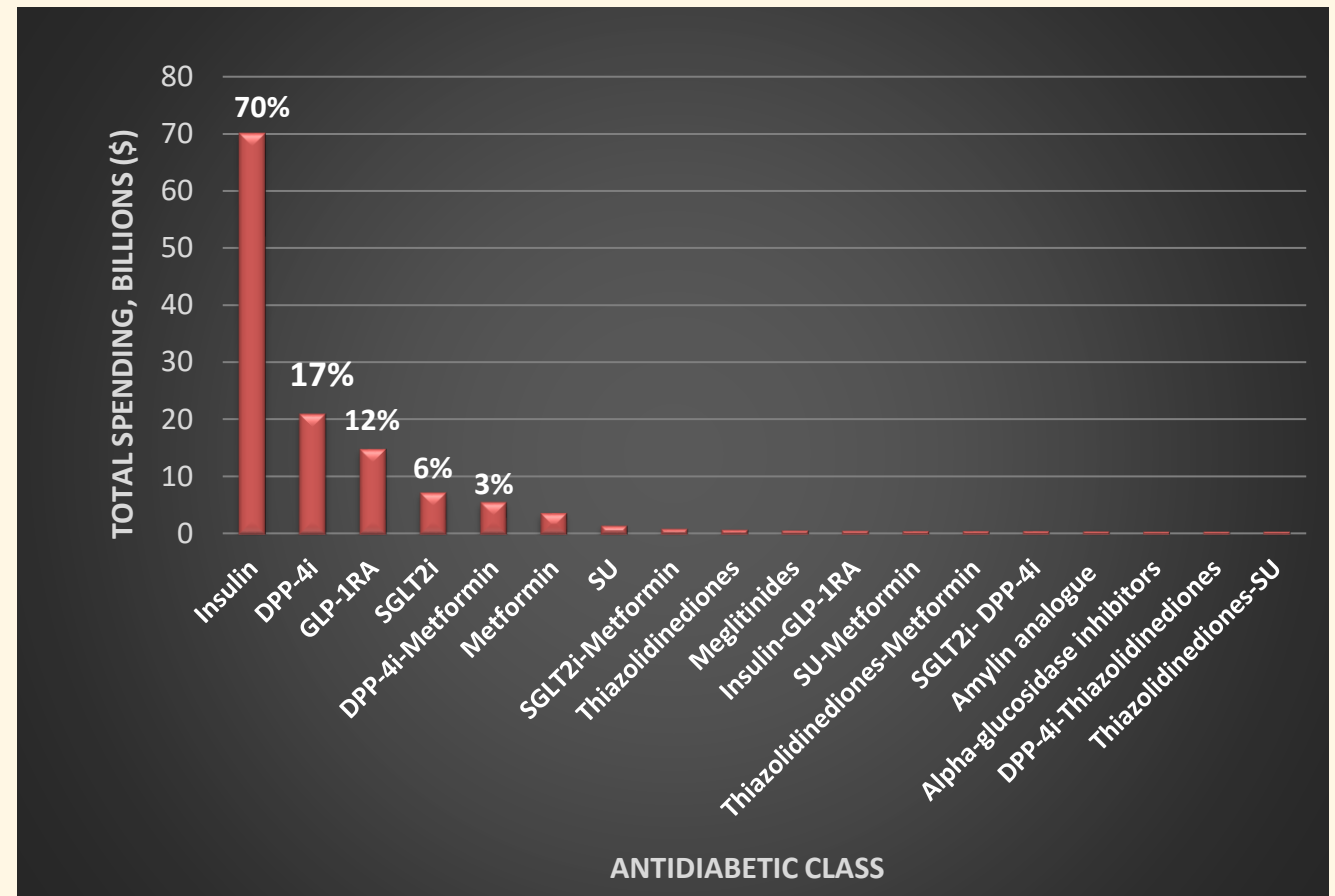


Figure 3. Medicare Part D Total Spending per Class of Antidiabetics

Question 2

What class/classes of non-insulin antidiabetic medications accounted for the highest Medicare Part D spending?

- a) Sulfonylurea (SU)
- b) Metformin
- c) Newer agents, including DPP-4i, GLP-1RA, and SGLT2i
- d) SU-Metformin

Results

- Significant growth in spending on newer agents

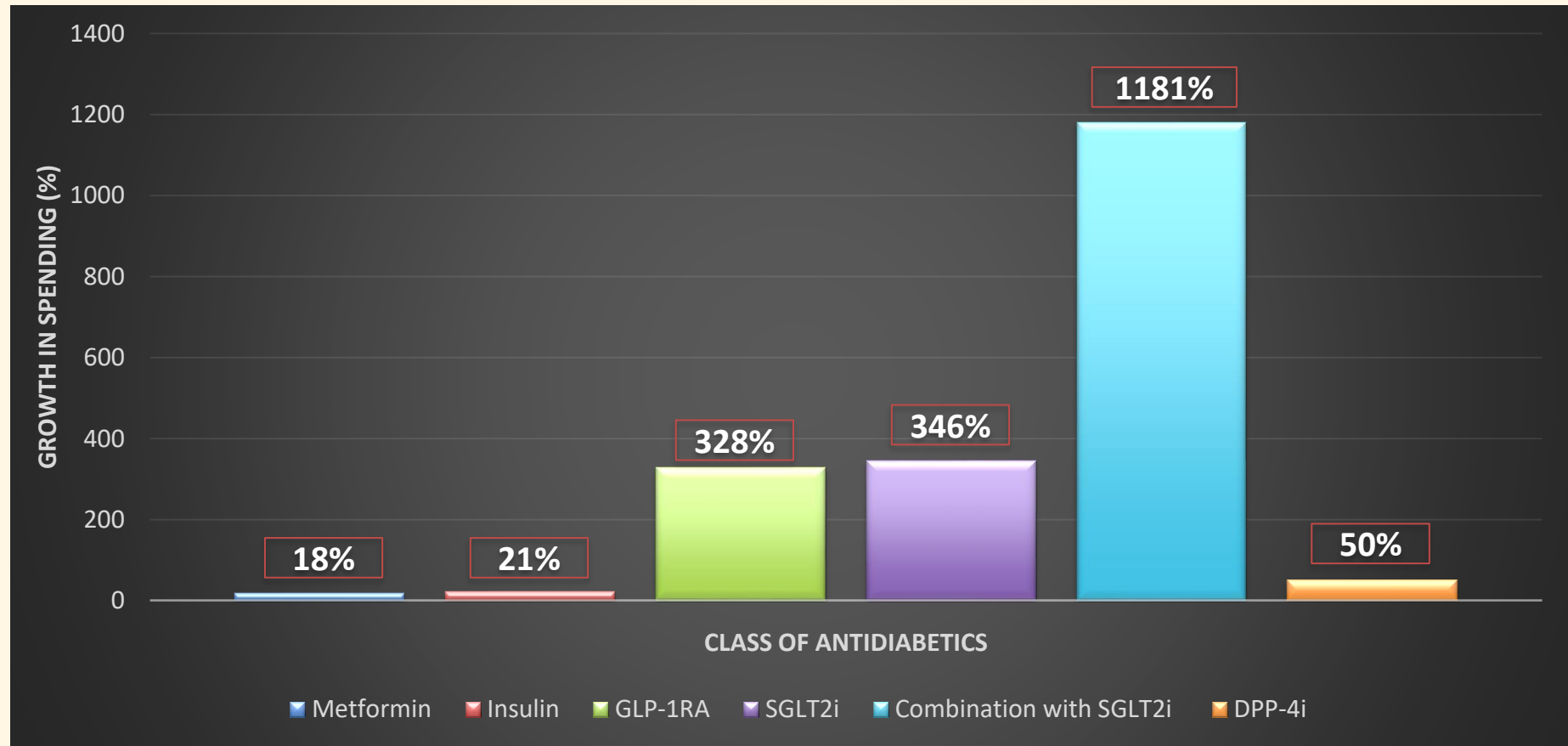


Figure 4. Percentage Growth in Total Medicare Part D Spending

Results

- 96% of total expenditure on brand antidiabetics
- 58% and 17% growth in spending on brand and generic antidiabetics, respectively

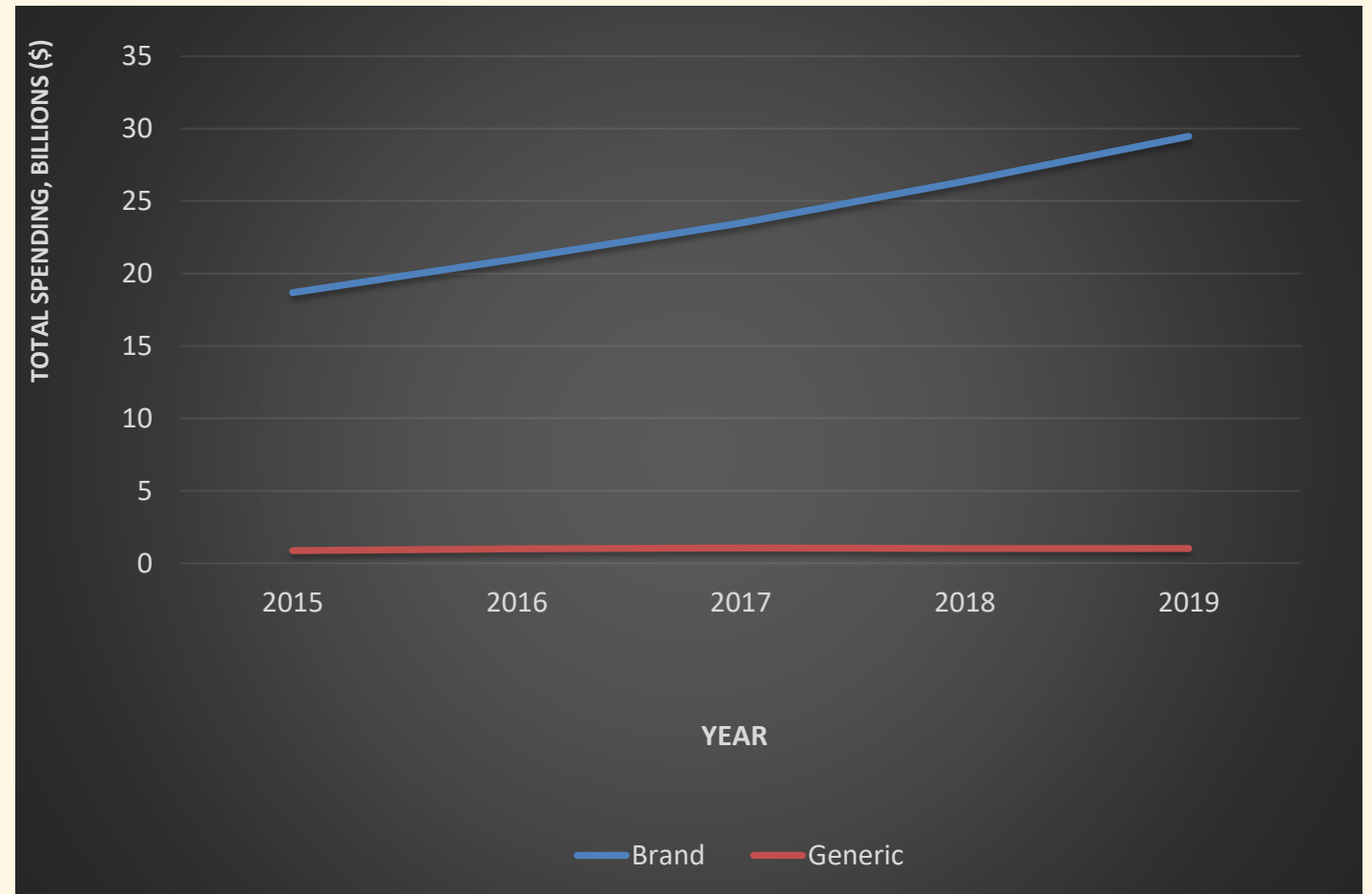


Figure 5. Trends of Medicare Part D Spending on Brand and Generics

Results

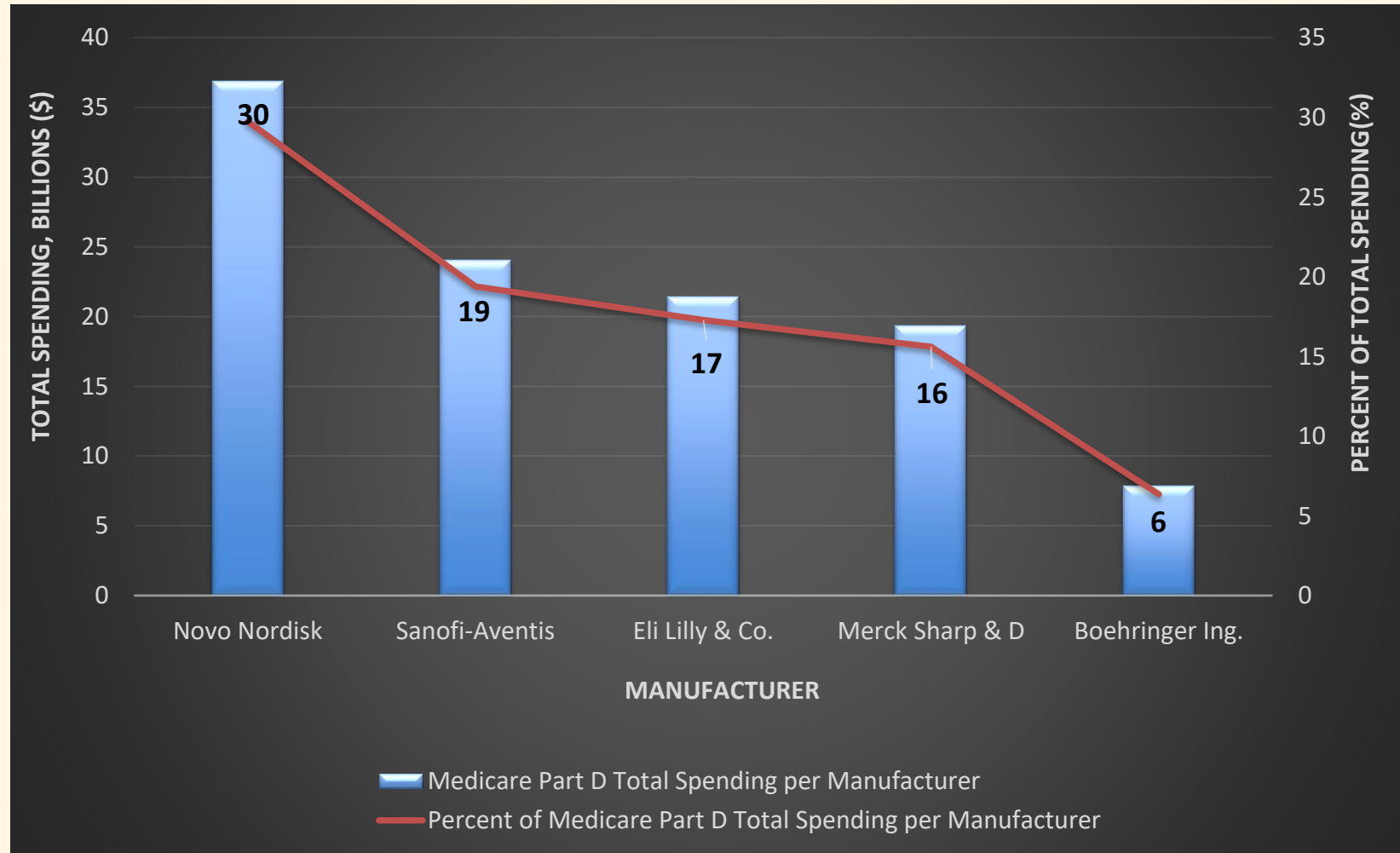


Figure 6. Medicare Part D Total Spending, Top 5 Manufacturers

Results

- Considerable increase in the utilization of newer agents containing SGLT2i

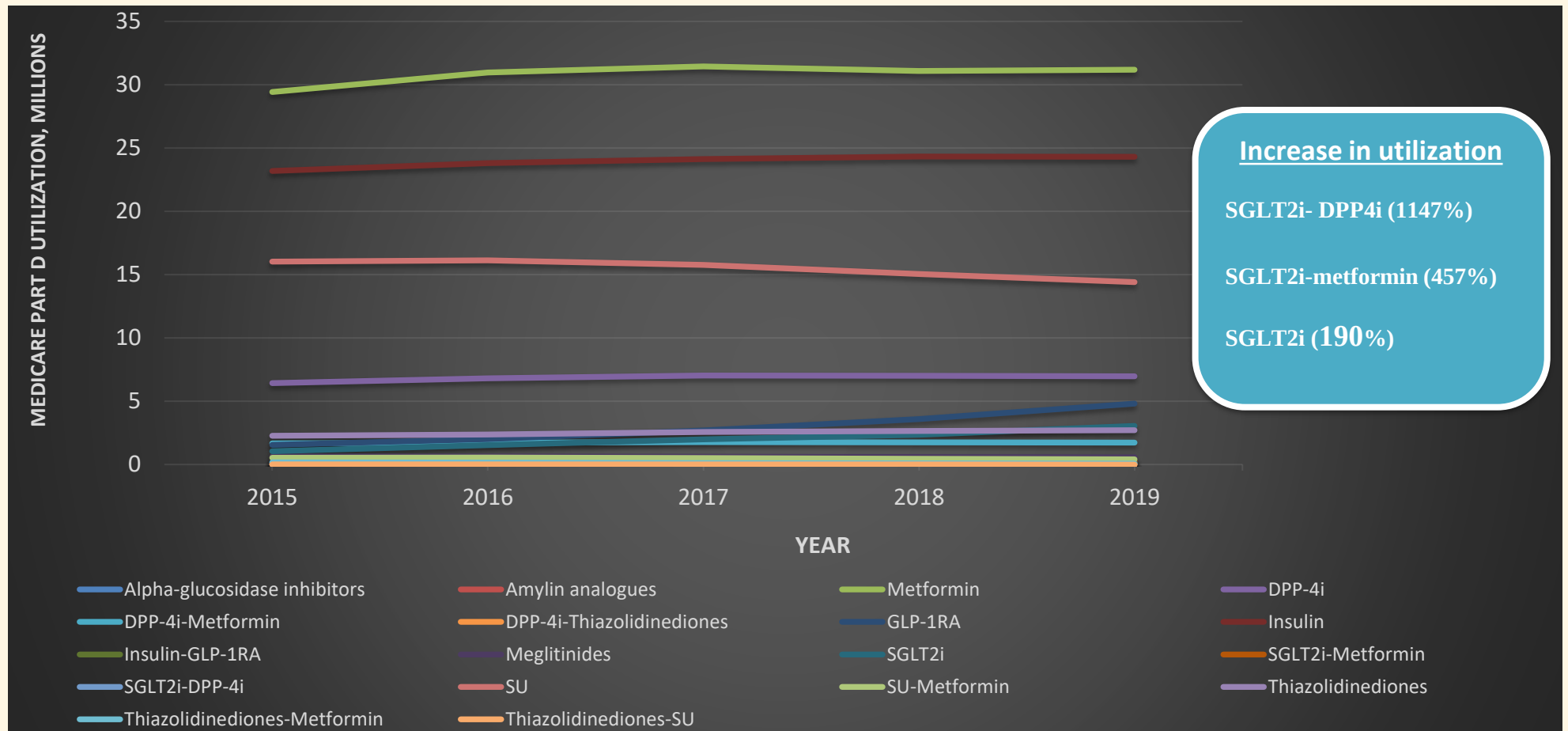


Figure 7. Trends in Medicare Part D Utilization

Question 3

The utilization of metformin had significant growth from 2015 to 2019.

- a) True
- b) False

Results

- 21% increase in the utilization of brand antidiabetics and relatively constant utilization of generic antidiabetics

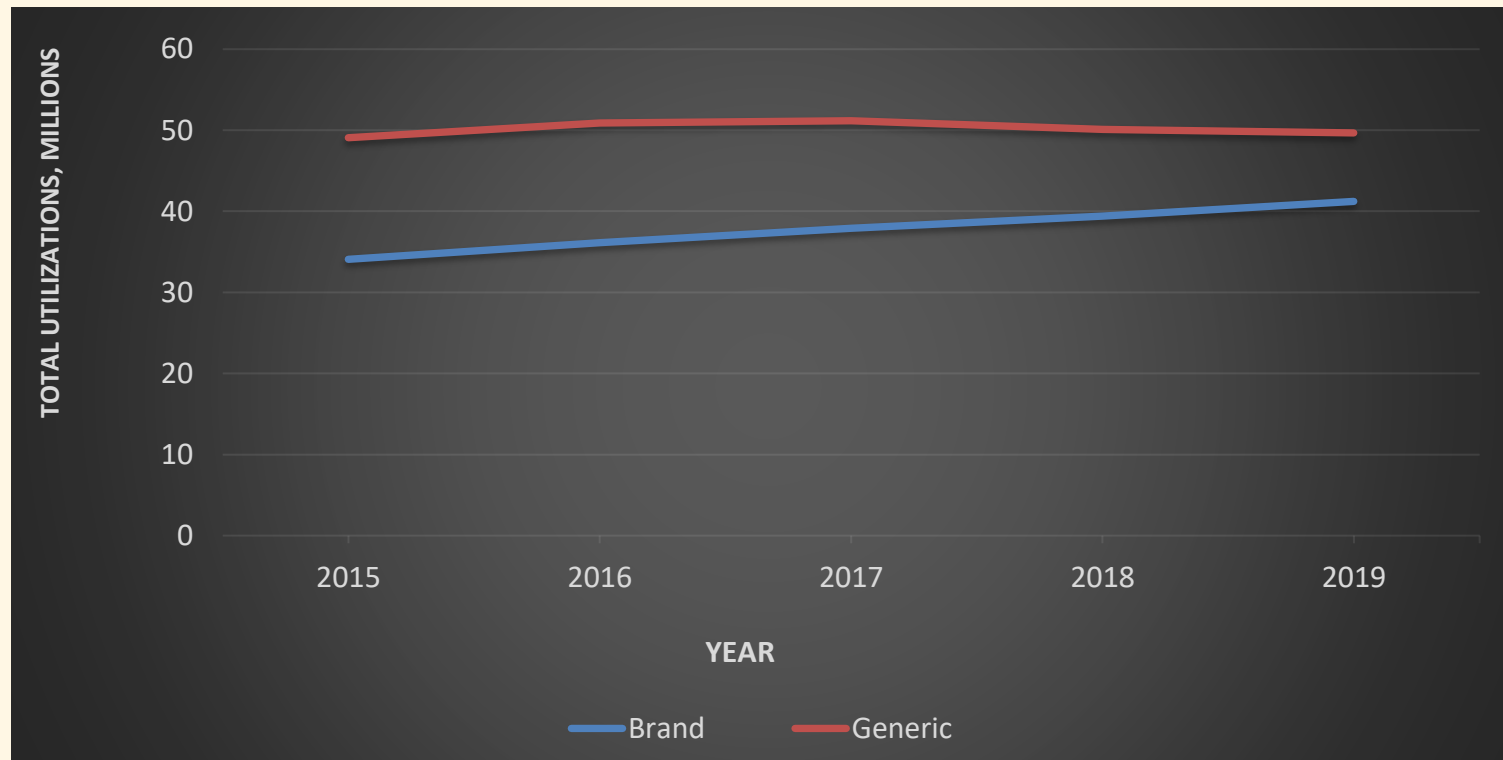


Figure 8. Trends in Medicare Part D Utilization, Generic vs Brand

Discussion

- 57% increase in the cost burden
- Significant increase in utilization and spending on newer agents

Limitations:

- Lack of individual-level data
- Lack of data on the number of beneficiaries and diagnostic codes

Conclusions

- Spending \$25 billion per year on antidiabetics
- Ensuring appropriate guideline-recommended treatment

Relevance to Conference Theme

Using real-world evidence in healthcare decision making

- Using real-world data to highlight the substantial cost burden
- Considerable growth in spending driven by newer, non-insulin antidiabetics
- Importance of screening and prevention programs

Contact information

Farideh Sistani, PharmD

Ellen H. Yankellow Health Outcomes Postdoctoral Fellow

University of Maryland School of Pharmacy

Department of Pharmaceutical Health Services Research

Department of Pharmacy Practice & Science

220 Arch Street, 12th Floor, Room 01-205

Baltimore, MD 21201

Phone: 410.706.0875

Email: fsistani@rx.umaryland.edu