

Prescription Return Trends in Two Ohio Community Pharmacies

Jack Conrad, Lakota Beavers and M. Chandra Sekar R.Ph., Ph.D.
The University of Findlay



ABSTRACT

Background: Prescription nonadherence is a major problem in today's healthcare. Several organizations have looked into this issue and have attempted to help patients become more adherent to their medications.

Objectives: The data gathered in this project will be categorized in terms of drug class, price, and refill status. This will then be compared to another study with similar methodology.

Results: 43,849 prescriptions from Athens and 33,302 prescriptions from Findlay were analyzed from October 2018-January 2019. From Athens, 5.7% were RTS compared to 7.2% from Findlay. The most commonly RTS medication class was antidepressants in Athens and antihypertensives in Findlay. Prescriptions from \$0.01-10 were most commonly returned in both locations. Fill status was roughly split evenly in both locations.

Conclusion: RTS prescriptions seem to be increasing, however this could be due to an increase in electronic prescribing among other factors. More research should be conducted for the sake of patient wellbeing.

INTRODUCTION

A major problem in healthcare is prescription adherence. While medications have helped many patients to combat their medical issues, as many as 50% of patients do not take their medications as prescribed.¹ Without proper adherence, it is growing increasingly difficult to treat chronic illnesses, which can lead to additional disease states and negative health events.

In 2008, CVS worked with a Harvard research team to see what prescriptions are being returned. The results found that roughly 338,416 prescriptions are not picked up in 3 months across the nation.² New prescriptions are 2.74 times more likely to be abandoned and prescriptions costing over \$50 are 4.68 times more likely to be abandoned.²

In response to this study, CVS pushed for more outreach attempts to patients in order to combat prescription non-adherence in 2010.³ This study plans to take another look at what prescriptions are being returned to see if anything has changed since the implementation by CVS.

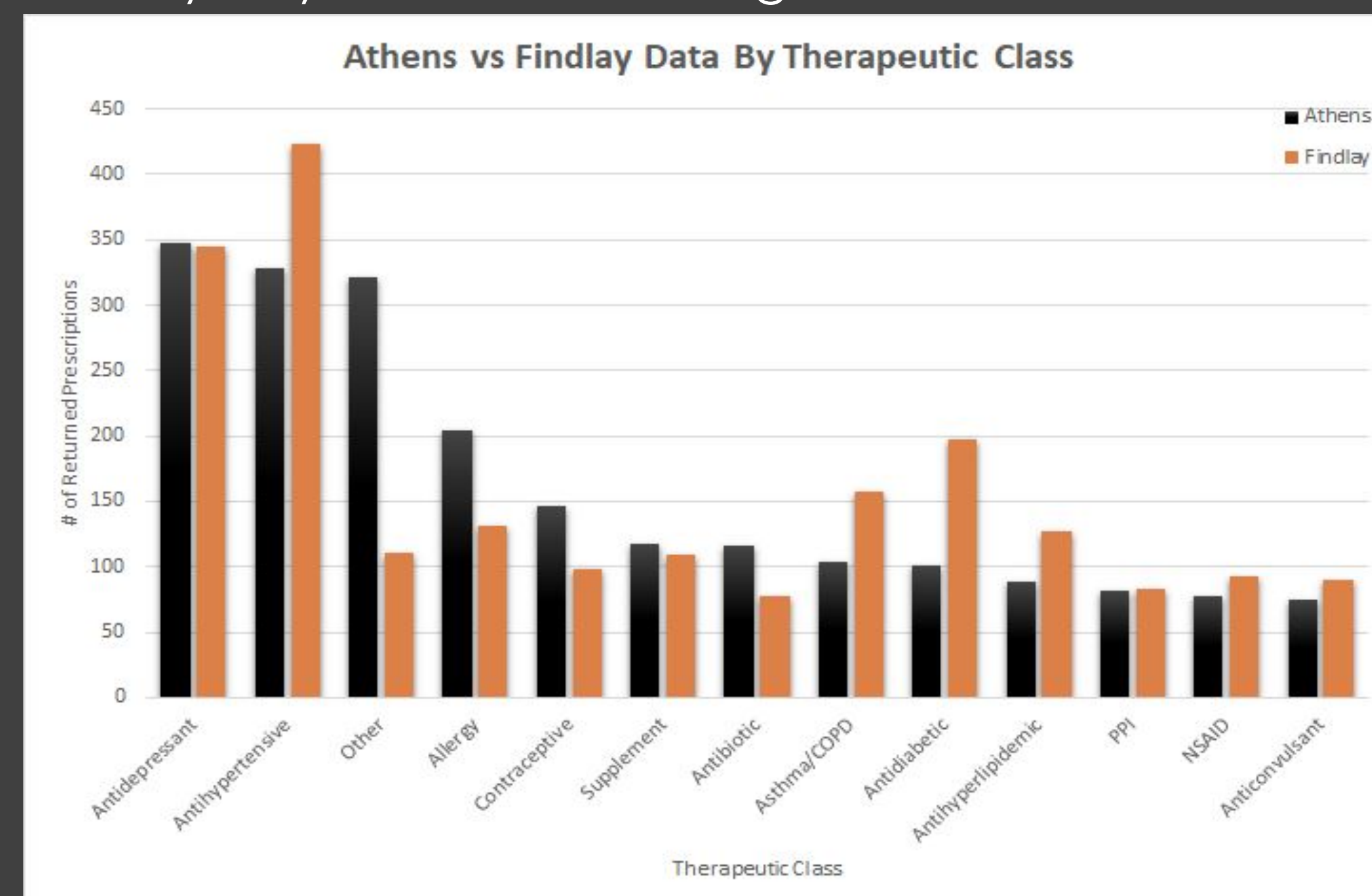
Objectives

Based on the data set that we have gathered, our goals of this project are to:

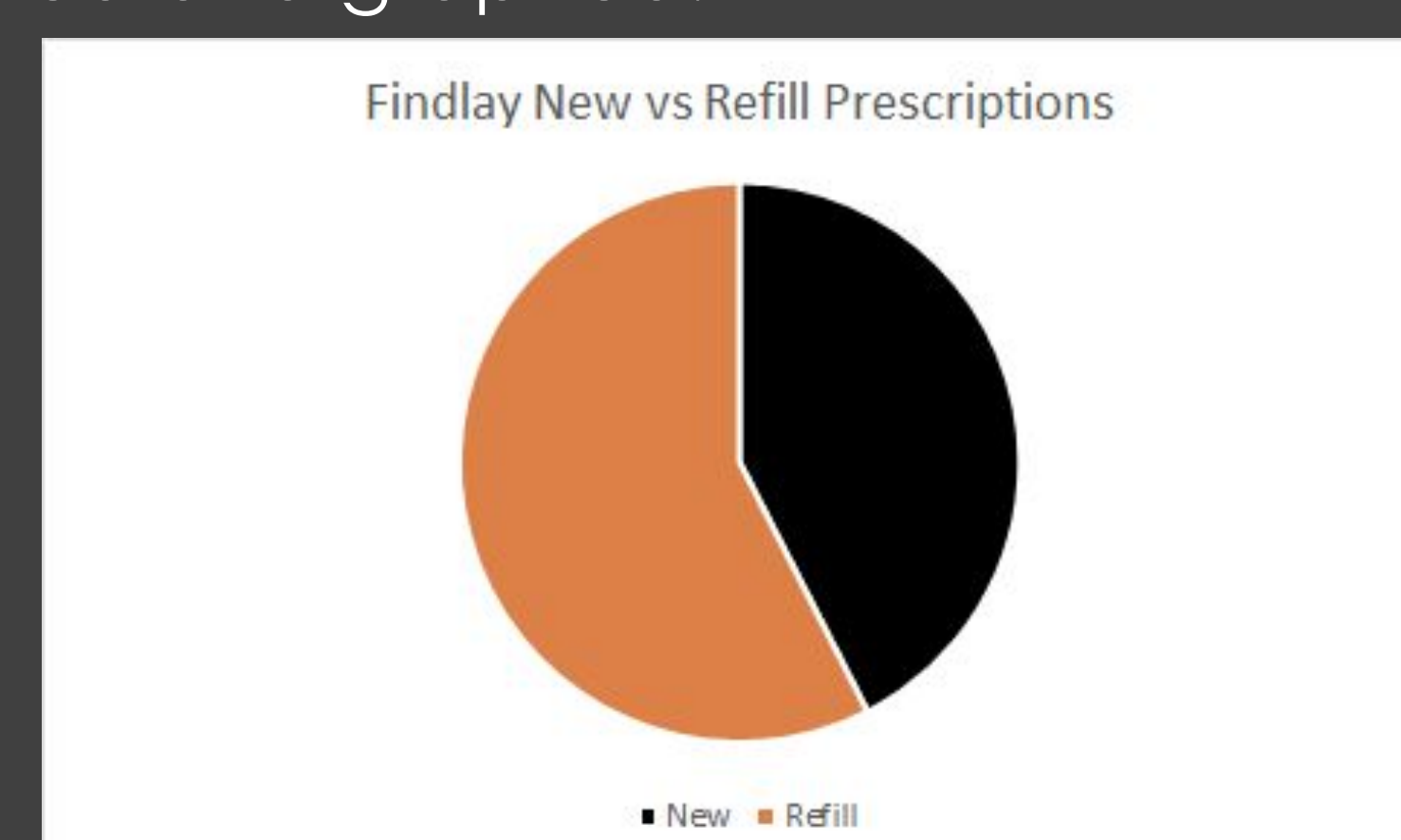
- 1) Breakdown the dataset based on drug classes.
- 2) Breakdown the dataset based on price.
- 3) Breakdown the dataset based on new fill or refill status.
- 4) Estimate the percentage of returned prescriptions based on the usual amount of patients at each store.
- 5) Compare the percentages for objective 4 to the national percentages from the original study done(2).

Methods

At CVS Pharmacies, prescriptions are held in waiting bins for two weeks for patients to pick them up. After this two week period, they will be marked to be returned to stock. A list of prescriptions due to be returned are printed off every day and then cataloged.

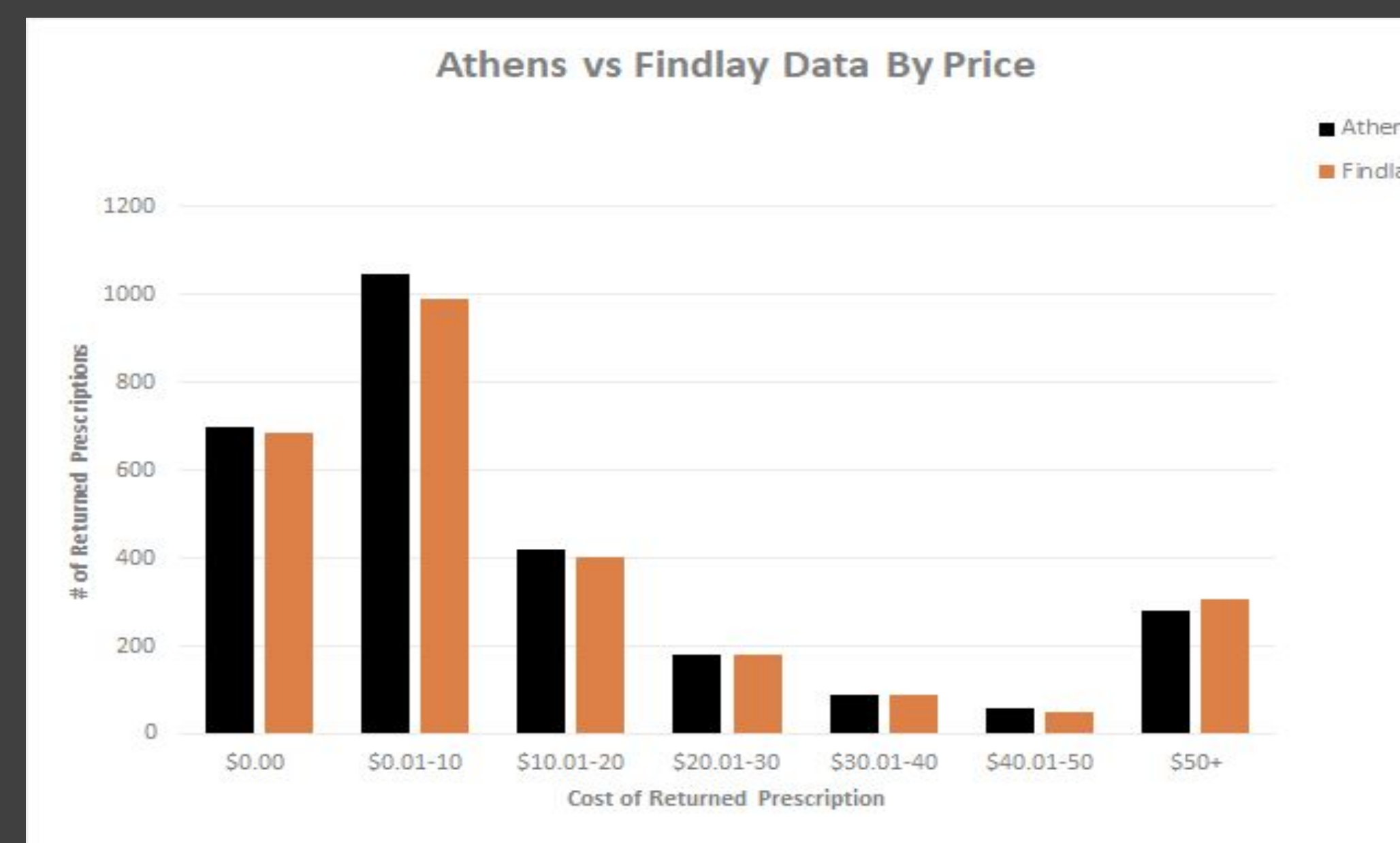


Utilizing four months worth of these data sheets from, we compiled a data set containing the prescription name, drug class, first fill or refill status, and price from two CVS pharmacies. The data was transferred from paper to Microsoft Excel where it could be analyzed and graphed.



Results

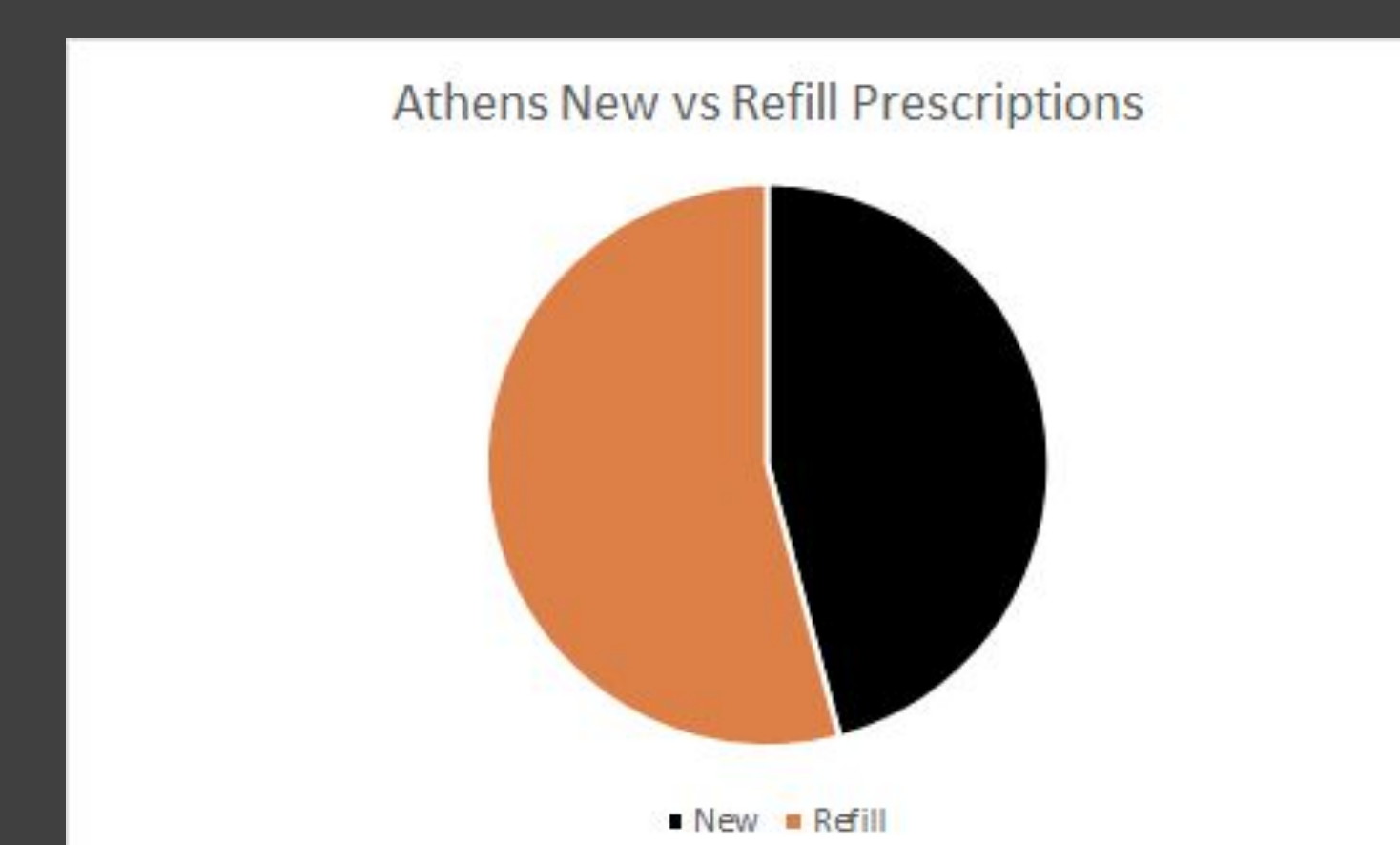
When grouped by class, the most returned drug class in Athens was antidepressants (n=347) followed by antihypertensives (n=328). The most returned drug class in Findlay was antihypertensives (n=423) followed by antidepressants (n=345).



When analyzed by price, the price range to have the most returned prescriptions was \$0.01-10 in both Athens (n=1045) and Findlay (n=991). The second most common price for returned prescriptions was \$0.00 in both Athens (n=698) and Findlay (n=686). These two data samples accounted for 63% of the returned prescriptions in Athens and 62% in Findlay.

In Athens, 1260 (45.9%) of the returned prescriptions were first fills and 1486 (54.1%) were refills. In Findlay, 1147 (42.5%) of the returned prescriptions were first fills and 1554 (57.5%) were refills.

Of the 43,849 prescriptions processed in Athens from October 1, 2018 to January 31, 2019, 2,493 (5.7%) were returned to stock. Of the 33,302 prescriptions processed in Findlay during the same time period, 2,398 (7.2%) were returned to stock. Compared to the national study performed by Shrank et al, the CVS stores in Athens and Findlay had a greater percentage of prescriptions returned for any reason.



CONCLUSIONS

Since 2010, it appears that trends among RTS prescriptions have remained relatively similar. In the case of these two pharmacies, the rates of RTS prescriptions are slightly higher than the national study performed by Shrank et al. This could be caused by a multitude of factors, but the biggest factor is speculated to be the increase in the amount of new electronic prescriptions. In the 2010 study, new prescriptions were found to be 2.74 times more likely to be abandoned compared to refills and electronic prescriptions were 1.64 times more likely to be abandoned compared to paper copy/written prescriptions.²

Based on this small sample size, it is uncertain whether the strategies implemented by CVS have improved RTS rates. Further research should be performed on a larger scale to increase external validity. Another limitation that was encountered was the use of paper RTS reports. The reports are printed the night before and some prescriptions on the report may have been picked up on the final day, but were not redacted from the report.

In conclusion, prescription adherence is still an issue that needs to be worked on. Further study into this field would be beneficial to patient wellbeing.

REFERENCES

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