

AusVaxSafety: Descriptive Analysis for Zostavax

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Introduction

- Zostavax, used to prevent shingles
- November 2016, Zostavax became free for patient 70 to <80
- Lower efficacy in the age group, but higher incidence of disease

Objective of the Study

The aim of this study was to generate visualizations of the trends in administration, and most importantly, the safety of the vaccine in this particular age group.

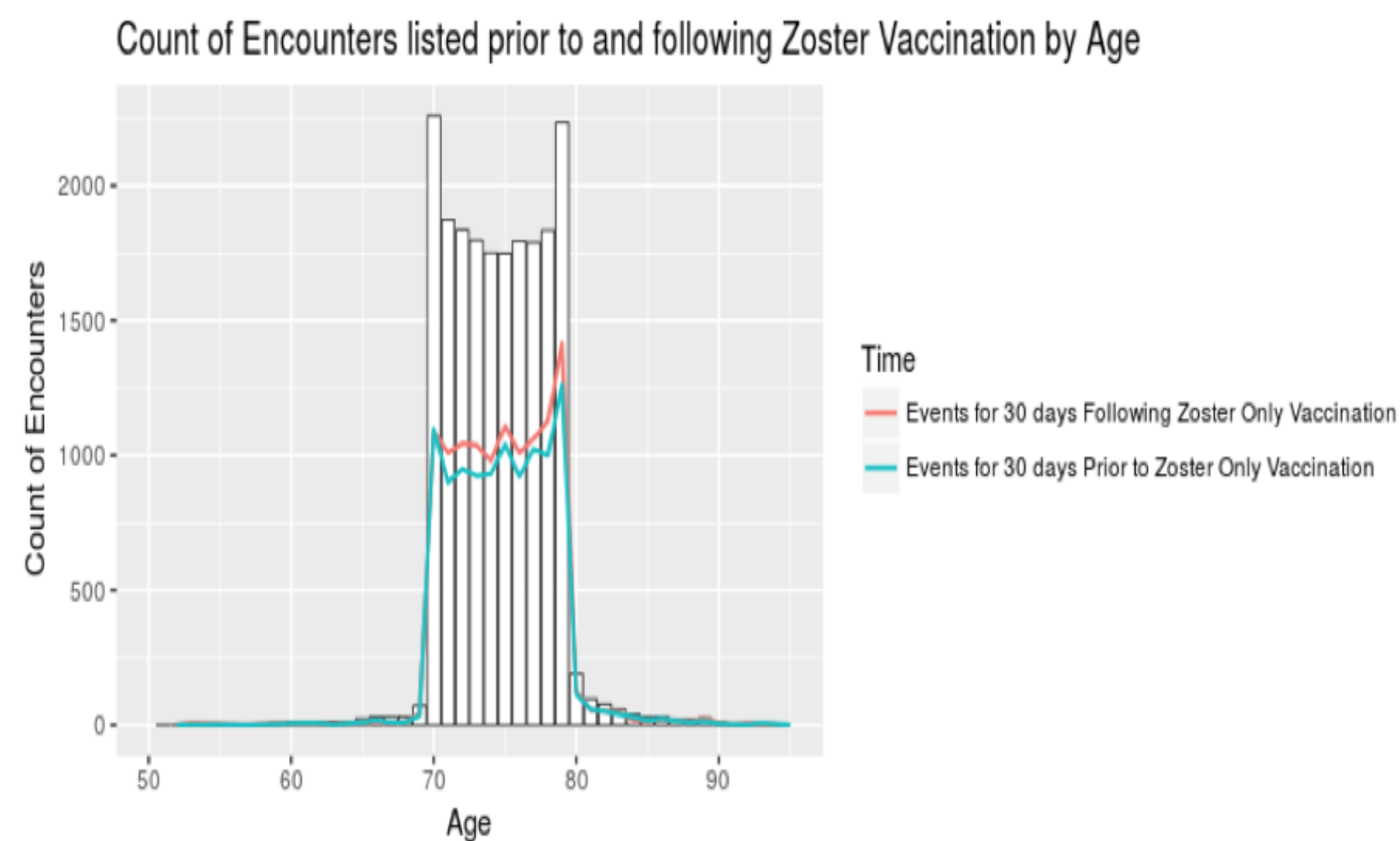


Methods

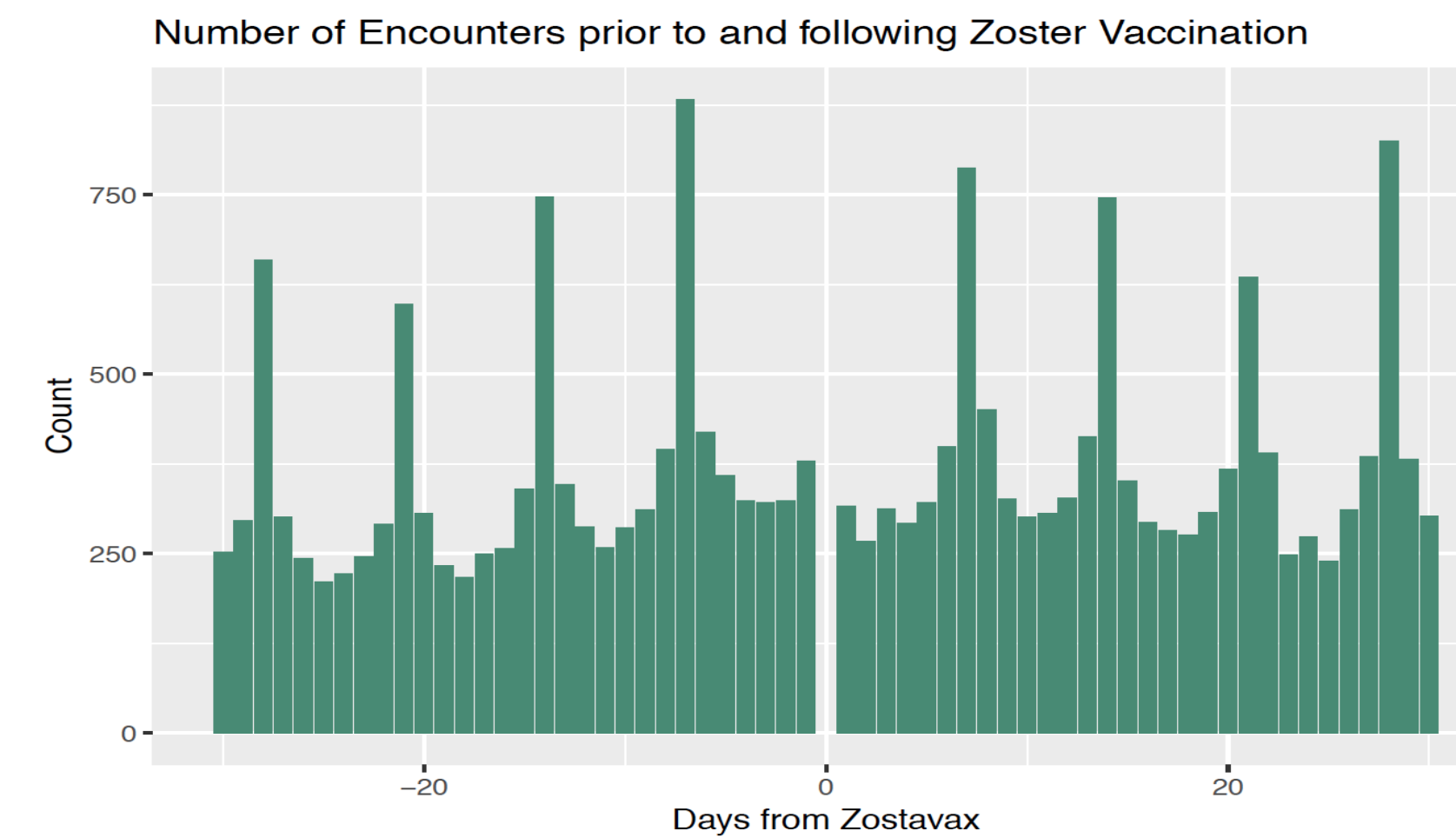
- NPS data collected across 529 different general practices throughout Australia
- 5 million patient records with 23,000 patients recorded for receiving Zostavax
- Used RStudio to generate graphs after a focus population was identified.

Results

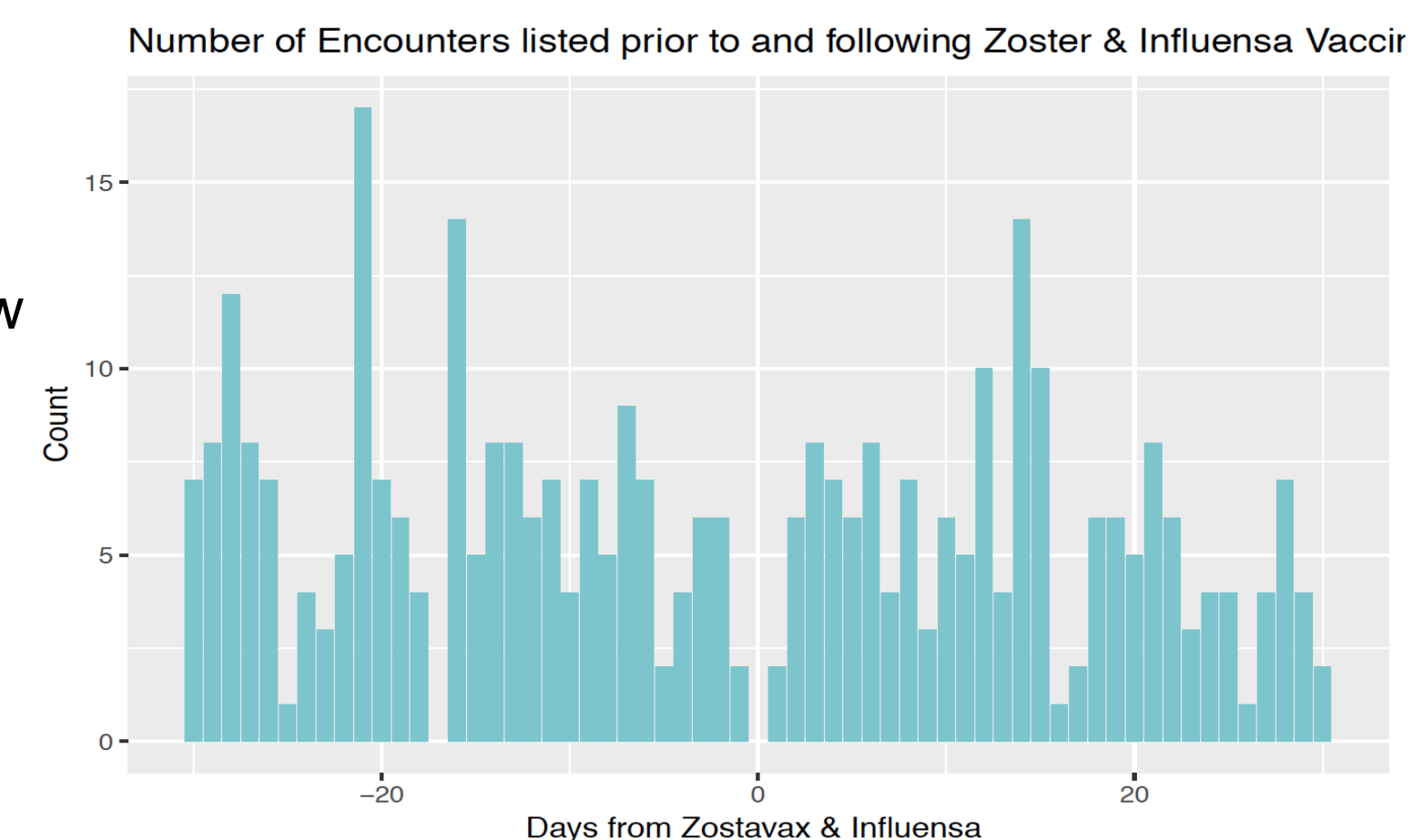
- A marker to determine safety of Zostavax was to compare number of patient-physician encounters prior to and following day 0
- Encounter- a physician-patient interaction
- There is no change in the trend of visits after day 0



- There were patients that received another vaccine in conjunction with Zostavax
- Important to look at the trends here because it would show whether or not Zostavax would only be safe by itself or could it be used with other vaccines
- Analysis of encounters prior to and following Day 0 show no difference in



- Breaking it down by age was important because it would show if the vaccine is less safe at a certain age
- Lines for before and after Day 0 almost overlap, with small values of difference in the count value
- Majority of vaccinated are 70 or 79 year olds



Discussion

- The patients that are receiving Zostavax are the patients who constantly visit their doctors as can be seen with the spike every 7 days.
 - The older the person, the more likely an increase in encounters because of vaccination as can be seen by graph 2.

Questions

- What is the uptake like for patients that do not constantly go to their general practitioners?
- Do number of encounters increase after vaccination if a patient has a certain condition?

Conclusion

- Generally, based on these visualizations, Zostavax is a safe vaccine for patients 70 to <80, even if used in conjunction with the influenza vaccine.

Acknowledgements

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