

# Pediatric dental appointment no show rate comparison between Medicaid and commercial insurance.

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## Background

- Children from low socioeconomic backgrounds often break or miss dental appointments.
- Missing dental appointments often leads to a myriad of problems at any dental setting. It is disruptive to the financial structure of any business entity and also robs any patient the opportunity of a timely dental appointment and treatment.
- There is a strong correlation between income level and dental appointments and the overall compliance and effective delivery of care.
- No-shows affect the productivity and efficiency of the dental care facility.

## Objectives

To compare the frequency of no show rates between Medicaid and Private (commercial) insurance in terms of making (either recalls or treatment) appointments in a private dental setting.

## Methods

- Retrospective Chart review**
- This is a study that examined pediatric patients in a private office in the state of Michigan ages 0-18 including special needs population up to age 20 who have scheduled dental appointments within the calendar year January 2022 to December 2022.
- Dentrix system was used to extrapolate data of all scheduled appointments and missed appointments for both groups in a calendar year.
- The no show rate or missed appointments of each insurance group was compared to the total number of appointments scheduled in the same year.

## Results

Figure 1: Comparison of Show vs. No show

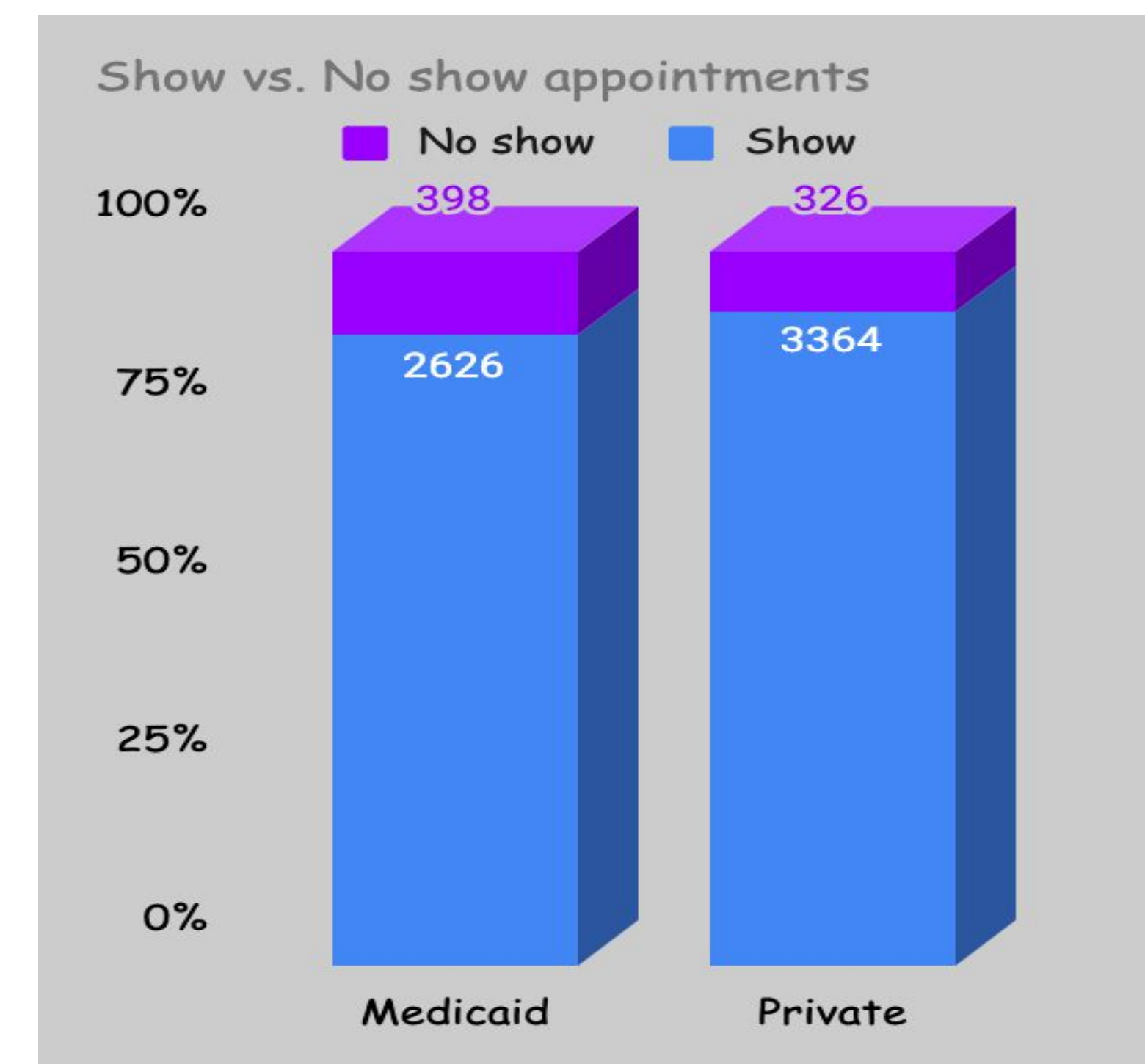


Figure 2: Insurance Comparison of No show rate

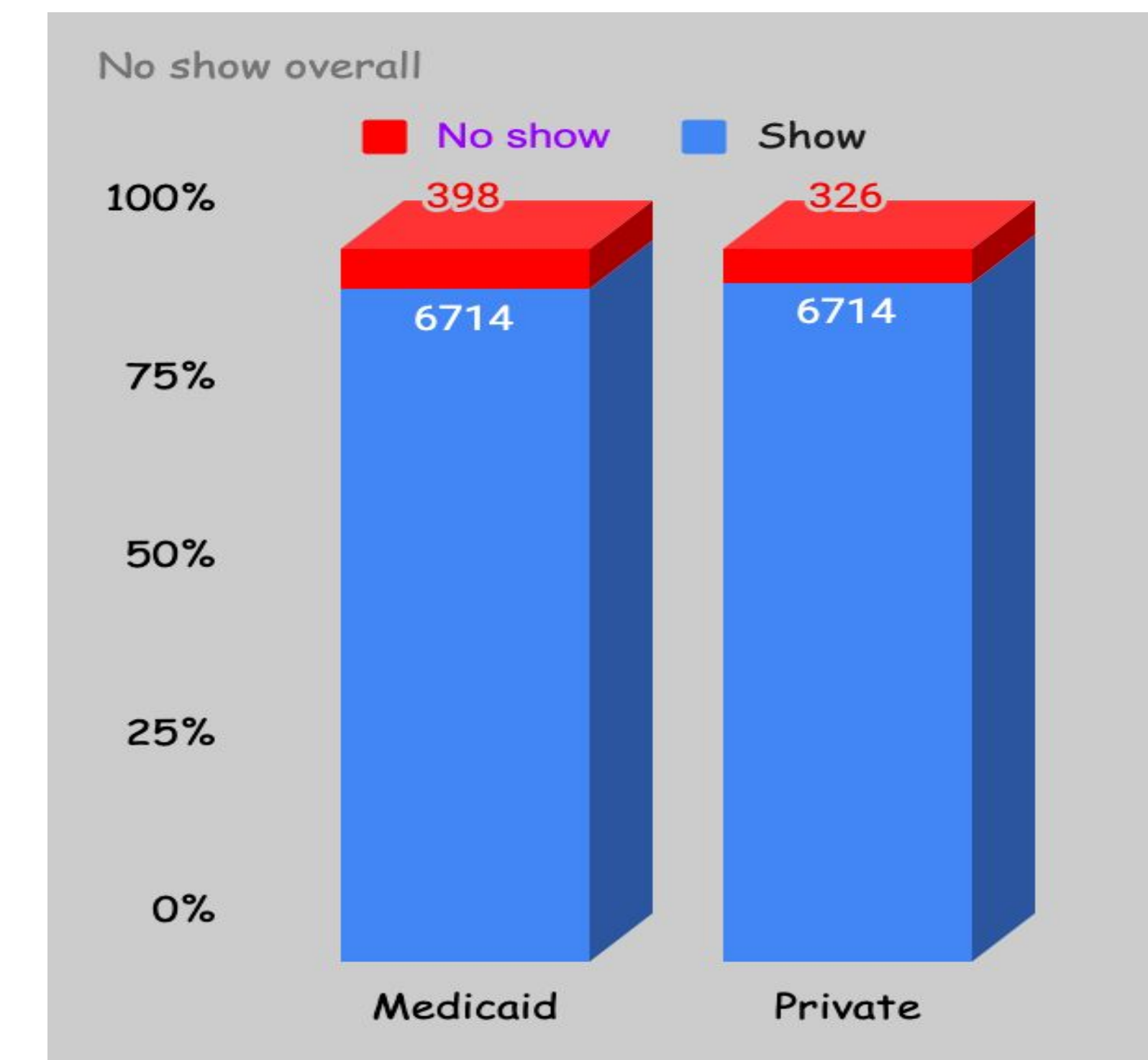


Figure 3: Failure rate by Insurance

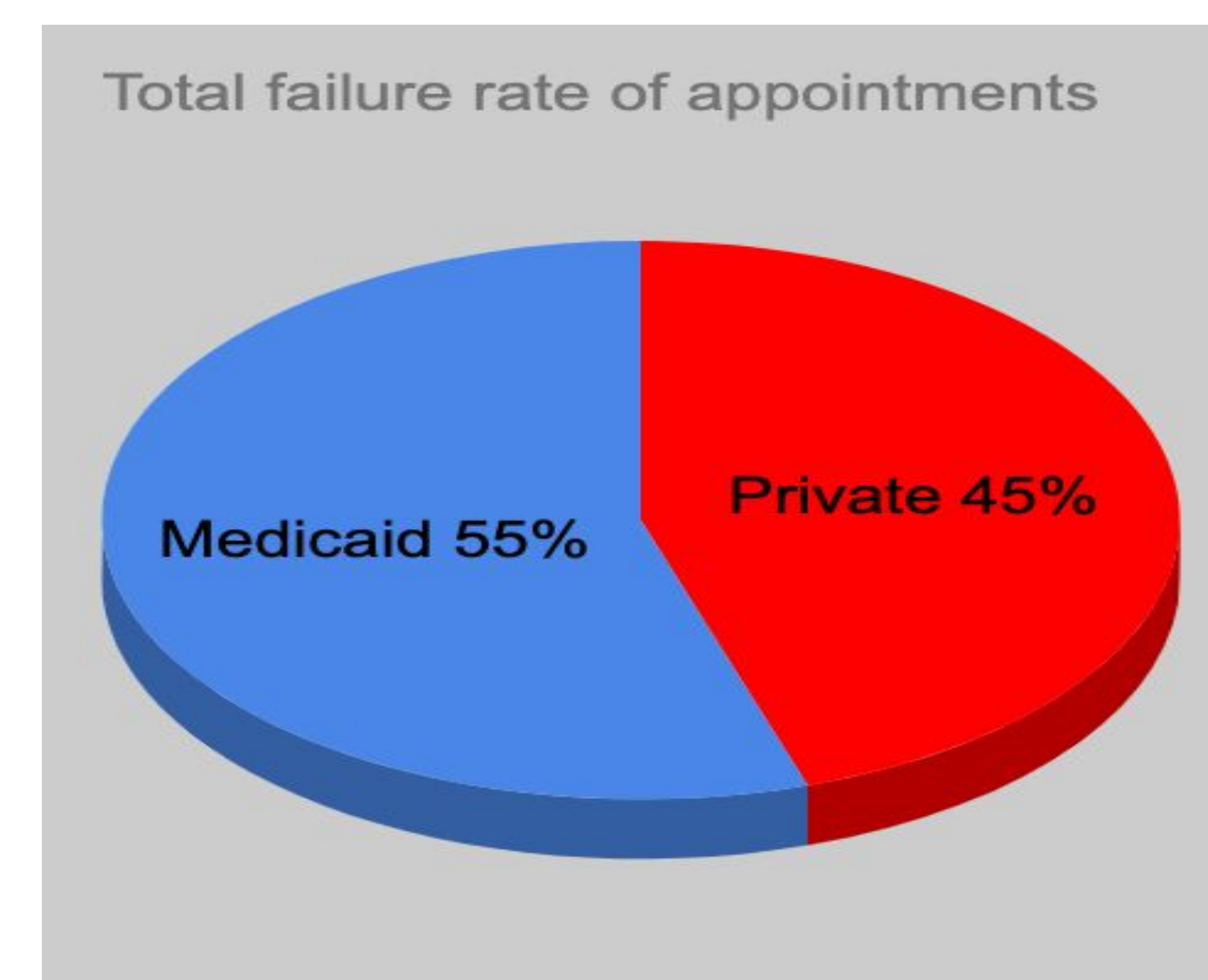


Figure 4: Overall Failure rate

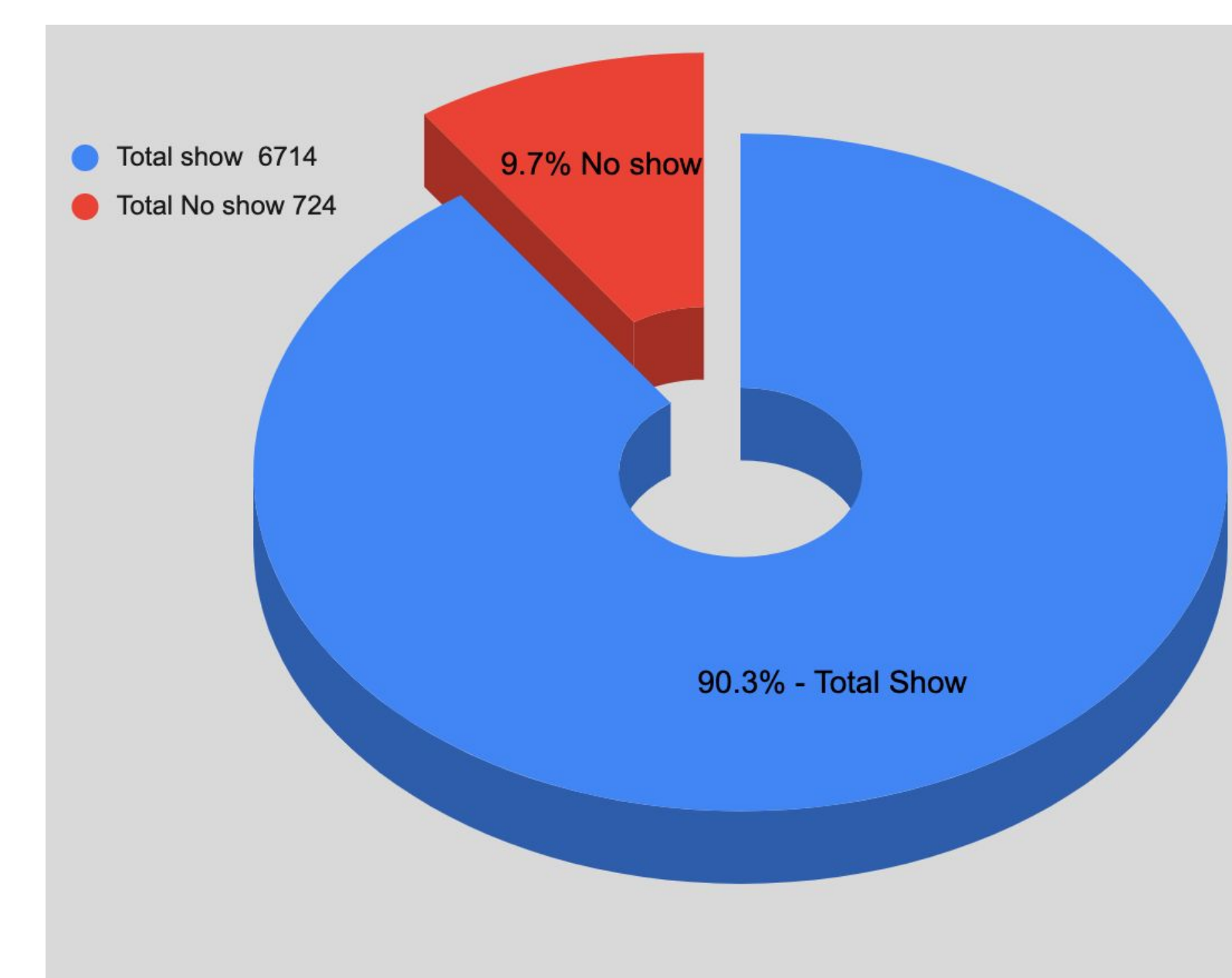


Figure 5: All appointment types

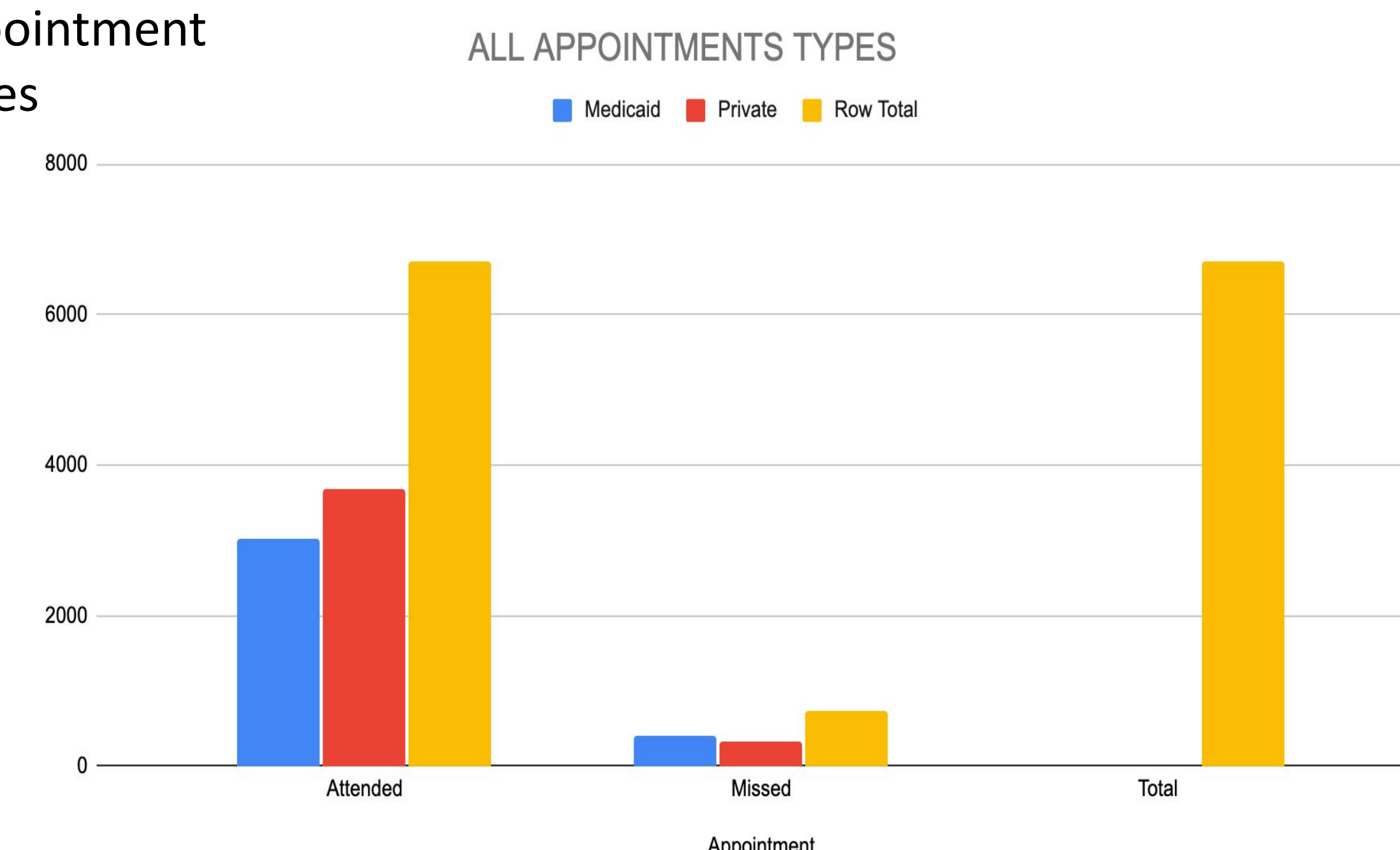


Figure 6: Z Test Analysis

Z-Test for proportion	Proportion Medicaid	Proportion Private	CI_Lower	CI_Upper	P_Value
Missed	0.868	0.911	0.058	0.027	< 0.001
Attended	0.131	0.088	0.027	0.058	< 0.001

## Result /Conclusions

- 6714 patients encountered
- Failure rate within each Insurance group was 15% (398 out of 2626) Medicaid vs. 9.59% (326 out of 3364) Private insurance. Figure 1
- Overall failure rate in each group to the total was 5.9% (398 out of 6714) for Medicaid vs. 4.8% (326 out of 6714) Private Insurance. Figure 2
- Failure rate by appointments for each group by type of insurance was Medicaid 55% vs Private 45%. Figure 3
- The overall No show rate was 9.7% compared to the total show which was 90.3%. Figure 4.
- The p-value associated with the z-test for each attendance category is <0.001. This value indicates strong evidence against the null hypothesis, suggesting a statistically significant difference between the proportions of attendance for individuals with Medicaid and Private insurance.
- In summary, the results indicate that "Medicaid" insurance holders have a significantly higher proportion of missed appointments compared to "Private" insurance holders, with the estimated proportions being approximately 91.17% for Medicaid and 86.84% for Private.

## Limitations

Cash paying patients were not excluded in the private group. The overall population is not representative of typical pediatric dental patients in an urban setting. Other factors that typically plague a low socio-economic populations may have played a big factor in access to keeping dental appointments such as lack of transportation.

## References

- Detman, LA.; Gorzka, PA. A study of missed appointments in a Florida public health department. Paper presentation at the One Goal Summer Conference, Tampa, Florida. 2000. [cited 2011 Jul 15]. Available from: <http://health.usf.edu/publichealth/chilescenter/pdf/missed%20appointments.pdf>.
- Pediatric Dental Appointments No-show: Rates and Reasons. Rupinder Bhatia, Esha C Vora, Anup Panda.

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