

Pediatric Dental Emergencies by Insurances in a Community Health Setting

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INTRODUCTION

- Research has shown having dental insurance increases the likelihood of a patient seeking routine care. It allows for more affordable dental treatments and lowers certain barriers to care¹.
- Children of a low socioeconomic background have more than twice the rate of dental caries and are less likely to receive preventive dental care².
- Patients visiting hospitals and other clinics that accept appointments on a short-term basis have been on the rise in recent years³.
- Those with lower access to care tend to make up a disproportionately large number of patients seeking dental treatment in an emergency room setting¹.

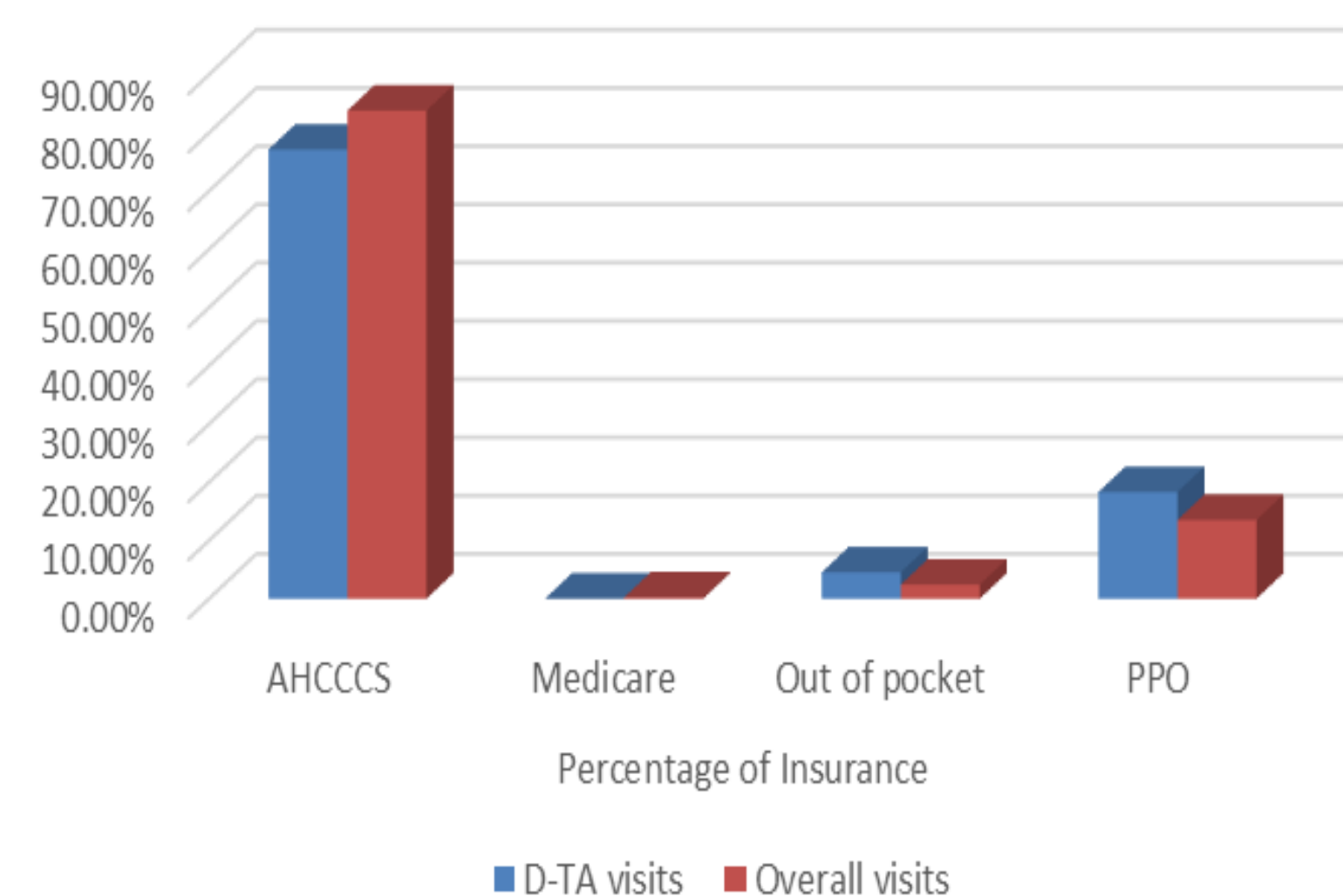
PURPOSE

To identify an association between patient insurance type, and their likelihood to schedule an emergency type appointment for a toothache (TA) at a community health center.

METHOD

- Retrospective chart review (1/1/2020-12/31/2021).
- The study aimed to help providers identify different patient populations that are more or less likely to need an emergency type appointment.
- Data was collected from patients aged 0-18 years during the study period. These records were then sorted by insurance type. The data sets were limited to patients that had completed a TA type appointment. Both sets of data were then compared and analyzed.
- Statistical analysis was performed using regression analysis and chi-squared analysis.

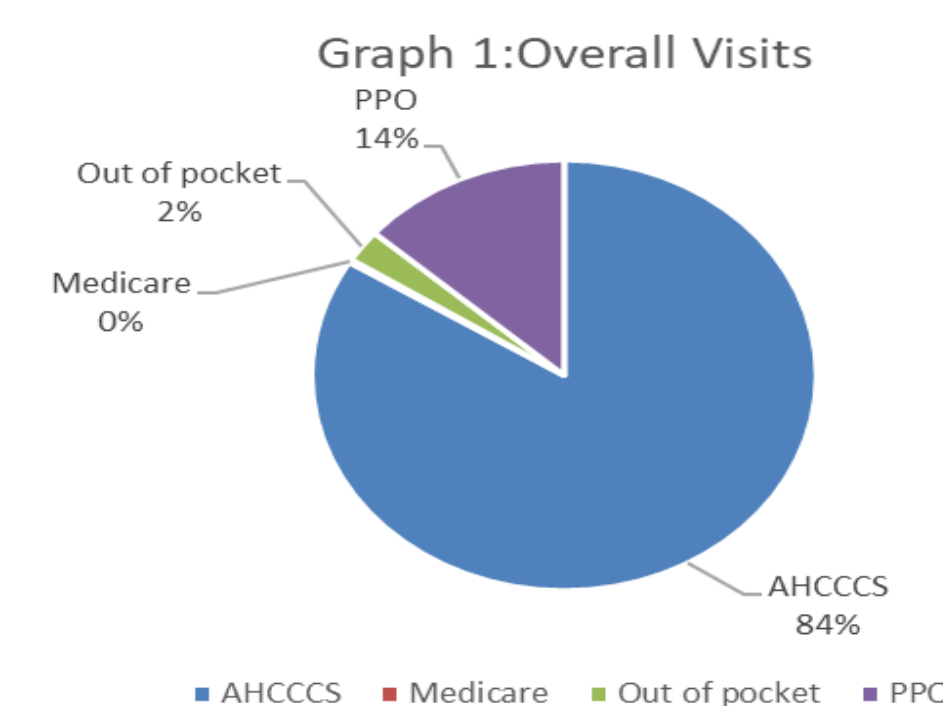
Comparison of D-TA vs Overall Visits



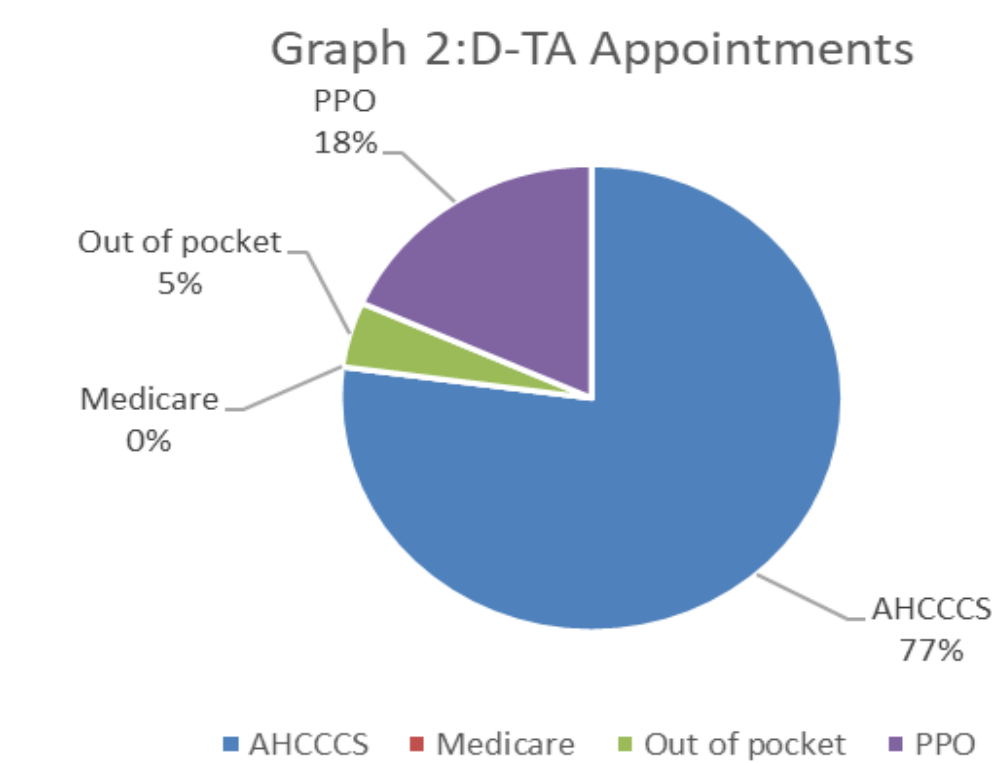
RESULTS

- 11,353 patient encounters, 508 (4.5%) were TA appointments.
- 8,462 (83.8%) were insured by AHCCCS (Arizona Medicaid), 24 (0.2%) by Medicare, 247 (2.4%) were uninsured, and 1365 (13.5%) carried PPO insurances.
- For TA appointments, 324 (77.1%) had AHCCCS, 0 Medicare, 19 (4.5%) were uninsured, and 77 (18.3%) carried PPO insurances.
- Regression analysis showed out of pocket participants were 100.01% more likely to schedule a D-TA appointment (OR=2.0009, p=0.004) compared to patients on AHCCCS.
- PPO participants were 47.3% more likely to schedule a D-TA appointment (OR=1.473, p=0.003) compared to patients on AHCCCS.

Graph 1



Graph 2



DISCUSSION

- Patients on AHCCCS are less likely to schedule an emergency type appointment compared to those patients with other insurance types.
- Even though patients covered with AHCCCS accounted for about 84% of the total number of appointments, they accounted for 77% of TA appointments.
- This study is limited in its scope due to the size of the data set. Other factors like socioeconomic status of patients, dental literacy, and concerns about geography could also help to paint a better picture of the factors that affect the patient population in the study.

CONCLUSIONS

- Pediatric patients covered with AHCCCS are less likely to have the need of scheduling an emergency type appointment than those covered with PPO or that pay out of pocket for services.
- More research is needed to understand the reasons why patients that have different types of insurance coverage, or lack thereof, schedule more TA type appointments.

REFERENCES

1. Da Silva, K., Kunzel, C., & Yoon, R. K. (2013). Utilization of emergency services for non-traumatic dental disease. *The Journal of clinical pediatric dentistry*, 38(2), 107–112.
2. Mofidi M, Slifkin R, Freeman V, Silberman P. The impact of a state children's health insurance program on access to dental care. *J Am Dent Assoc.* 2002 Jun;133(6):707-14; quiz 767-8. doi: 10.14219/jada.archive.2002.0266. PMID: 12083646.
3. Helen H. Lee, Charlotte W. Lewis, Babette Saltzman, and Helene Starks, 2012: Visiting the Emergency Department for Dental Problems: Trends in Utilization, 2001 to 2008 *American Journal of Public Health* 102, e77_e83, <https://doi.org/10.2105/AJPH.2012.300965>