

BACKGROUND

Patient no-shows pose a significant problem in healthcare affecting 80% of scheduled appointments and resulting in billions of dollars in losses¹. No-show rates vary by clinic type and patient demographics. Urban primary care clinics serving vulnerable populations tend to have higher rates, particularly when considering factors like transportation problems, trouble taking time off work or school, race, perception of well-visits, and insurance coverage². Social determinants of health such as financial limitations, transportation barriers, parental factors including education level, and limited Medicaid-accepting providers contribute to missed appointments and reduced access to pediatric healthcare service^{2,3}. Understanding patient demographics and how it relates to no-show appointments is essential for designing equitable and targeted interventions thereby improving attendance and optimizing dental care.

PURPOSE

To identify the demographics of patients that no-show to their dental appointments at Children's National Hospital (CNH) and design targeted interventions to improve attendance and optimize oral healthcare delivery.

METHODS

After IRB review, a retrospective chart review was completed for patients who no-showed their appointments as indicated by the current dental terminology code D9986. A random date generator was used to select patients, and demographic information was collected including gender, zip code, insurance type, missed appointment date, appointment type, healthy status, and any previous missed appointments. Descriptive statistics were completed.

RESULTS

- A total of two hundred and thirteen patients who missed their dental appointments were randomly selected for review.
- Males accounted for a slightly higher proportion of the missed appointments (54.6%).
- The highest concentration of no-shows occurred among patients living in Southeast Washington, DC, particularly in zip codes 20020 (11%) (Wards 7/8) and 20019 (16%) (Ward 7) (Figure 1).
- Patients insured through state run insurance programs had the highest no-show rates compared to those insured through private insurance plans.
- Preventive care visits accounted for the largest share of missed appointments (48%), followed by other appointments such as extractions, pre-BMT visits, consults, and follow-ups (24%), restorative care (22%), and limited exam visits (7%) (Figure 2). Of those with prior scheduled visits, preventive care was again the most common (41%), compared with restorative (20%), limited exam visits (24%), and other visit types (15%).
- Half of all patients reported at least one medical condition, and among these (n = 107), 43% had neurodevelopmental disorders such as ADHD, autism, developmental delay, or global delay. Asthma was the next most reported condition, affecting 28% of patients that reported a medical condition.

Figure 1. Ward Distribution

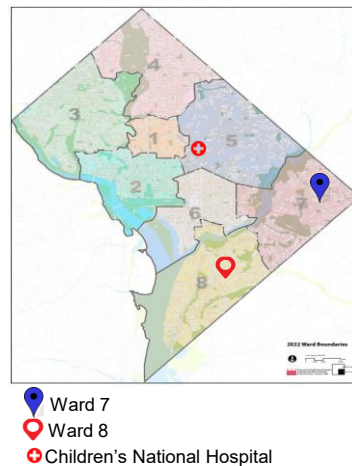
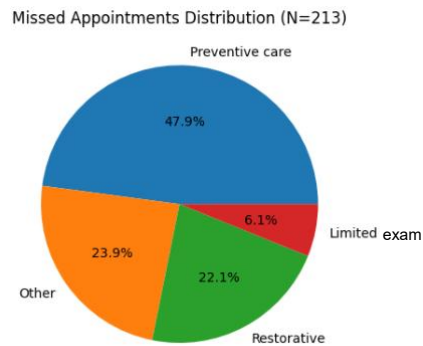


Figure 2. Distribution of Missed Appointments by type of appointment



*Other appts include extractions, pre-BMT visits, consult, and follow-ups

DISCUSSION

- Missed dental appointments were most common among patients living in Southeast Washington, DC, particularly in Wards 7 and 8. These communities are known to experience longstanding structural inequities, including limited transportation access and fewer local resources⁴. The findings are consistent with prior literature linking socioeconomic disadvantage and transportation barriers to higher no-show rates in urban pediatric settings
- Predominance of missed preventive visits aligns with previous literature that well-care appointments are often perceived as lower urgency⁵, increasing the vulnerability to gaps in routine dental care.
- Higher no-show rates among patients insured through state-run insurance programs reflect broader socioeconomic patterns that influence healthcare utilization⁶.
- Behavioral concerns, competing appointments, and other challenges may contribute to the high no-show rate seen in patients who have neurodevelopmental disorders⁷.
- These findings suggest that missed appointments reflect structural and system level barriers rather than isolated patient behavior.
- This project is limited by small sample size, short timeframe, absence of a comparison group and limited capture of social determinants of health. Future work should evaluate targeted interventions and assess their impact on no-show rates and equity in pediatric oral healthcare delivery.

CONCLUSIONS

Missed pediatric dental appointments were associated with insurance status, neurodevelopmental complexity and with preventive visits disproportionately affected. Collectively, these findings highlight the need for targeted, systems-based interventions such as optimized scheduling infrastructure, reminder systems, transportation support and enhanced accommodations for children with neurodevelopmental conditions to mitigate no-show rates and improve equity in oral healthcare delivery.

REFERENCES

