

Pediatric Emergency Dental Visits in Hospital and Non-Hospital Clinics



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INTRODUCTION

Pediatric dental emergencies—including trauma, infection, untreated caries, and eruption-related concerns—represent a significant burden on children, families, and healthcare systems¹. Many of these visits are preventable and reflect gaps in access to routine and preventive dental care, particularly among underserved populations². Social determinants of health (SDH), such as socioeconomic status, insurance coverage, and access to providers, strongly influence patterns of emergency dental utilization³. Children with special health care needs (SHCN) are especially vulnerable due to increased medical, behavioral, and provider-related barriers to care⁴. Federally qualified health centers (FQHCs) and pediatric dental residency programs serve as critical safety-net providers, improving access to both preventive and urgent dental services. However, limited data exist comparing emergency care delivery between hospital-based and community-based residency clinic settings.

PURPOSE

The purpose of this study was to characterize the demographic, medical, and dental profiles of pediatric patients presenting for emergency dental care within a residency-based FQHC program. Another aim was to compare patient characteristics, reasons for presentation, and treatment outcomes between hospital-based and non-hospital-based clinic settings following clinic relocation. This study also sought to evaluate how clinical setting may impact access to care and utilization patterns in a pediatric population.

METHOD

A retrospective chart review was conducted of 258 pediatric patients (≤16 years) who presented for emergency dental evaluations within a pediatric dental residency program within an FQHC in San Diego, CA. Visits were identified using CDT codes D0140 (Limited Oral Evaluation) and D0160 (Detailed and Extensive Oral Evaluation). Patients were treated in a hospital-based clinic (November 2023–January 2024) or two non-hospital-based clinics (November 2024–January 2025) following program relocation. Extracted variables included demographics (age, gender, race/ethnicity, language, residence), insurance status, ASA classification, SHCN, dental home status, recall compliance, reason for visit, presence of infection, treatment rendered, and referrals. Descriptive statistics and chi-square or Fisher's exact tests were used for comparisons, with significance set at $p < 0.05$.

FIGURE 1

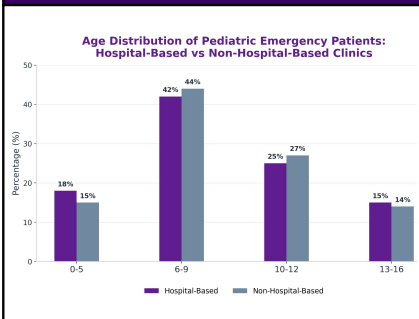


FIGURE 2

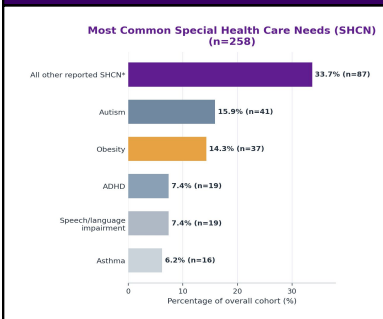


FIGURE 3

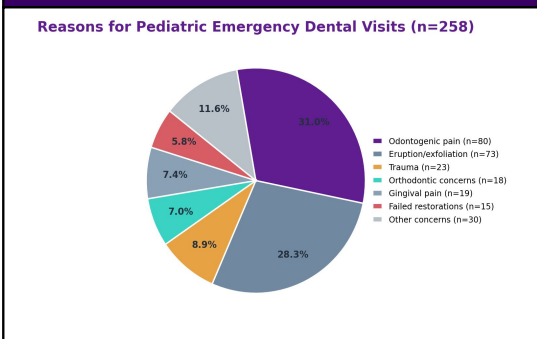
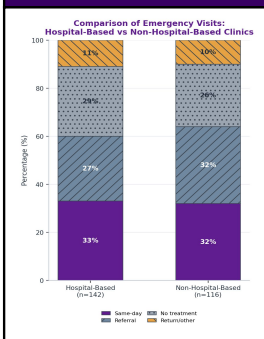


FIGURE 4



RESULTS

The study included 258 pediatric patients, with the largest age group being 6–9 years (43.0%). Most patients were insured by Medi-Cal (94.6%) and resided within San Diego County (87.6%). Nearly half of patients (45.7%) had at least one SHCN documented, exceeding national estimates⁵. The most common reasons for presentation were odontogenic pain due to caries or abscess (31.0%) and eruption/exfoliation concerns (28.3%), followed by trauma and orthodontic concerns⁶. Same-day treatment was provided in 32.6% of visits, most commonly extractions, while 29.5% of patients required referrals for advanced or specialty care⁷. Antibiotic use was relatively low (6.6%), consistent with guideline-based care. Comparisons between hospital-based and non-hospital-based settings demonstrated largely similar patient demographics, clinical characteristics, and treatment patterns, with minor differences in gender distribution, dental home documentation, and preferred language.

CONCLUSIONS

Pediatric dental residency clinics within FQHCs play a critical role in delivering emergency dental care to underserved and medically complex pediatric populations. The high prevalence of SHCN and predominance of pain-related visits highlight persistent gaps in preventive care and timely access to definitive treatment. Despite differences in clinical setting, emergency care delivery remained consistent between hospital-based and community-based clinics, suggesting that residency programs can effectively function across diverse environments. These findings underscore the importance of expanding access to preventive services, reducing delays in definitive care, and supporting residency-based training programs as key components of the oral health safety net.

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