

Introduction

Data collected from a National Survey of Children's Health (NSCH) in 2017-2018 revealed that approximately 18.5% children in the United States had a special health care need (SHCN).² Patients with SCHN often face many barriers to accessing dental care including physical, geographic and financial factors. As a result, dental care is the most prominent unmet health care need among this population³.

As these children approach adolescence and adulthood, the transition of care from pediatric to general dental providers becomes an increasingly critical aspect of their health management. This transition period presents unique challenges, as dental professionals must be equipped to manage the evolving needs of patients with SHCN and ensure continuity of care while adapting to the complexities of adult dental practices.

Currently, pediatric dentistry is the only dental specialty required by the Commission of Dental Accreditation to be trained in the provision of care for patients with SHCN³. Pediatric dental providers effectively manage patients with SHCN, but their services often exclude adult dental care, leaving a significant gap for adolescent and adult SCHN patients.

The purpose of this research study is to explore the state of dental care access for patients with SHCN, with a particular emphasis on the transition from pediatric to adult care. This study aims to evaluate the factors that influence pediatric dental providers' ability to treat patients with special health care needs (SHCN), the age range and scope of care they are comfortable providing, and the patterns of referral when transitioning patients to adult care. By examining these aspects, the research highlights current practices and potential gaps in care, particularly during the critical transition period from adolescence to adulthood.

Objectives/Hypothesis

Objectives:

- To determine the primary factors that influence a pediatric dental provider's ability to treat patients with special needs
- To understand the age range and scope of dental treatment pediatric patients are comfortable with providing for patients with SHCN
- To assess where and what percentage of patients with SHCN pediatric dentists refer for transition of care

Hypothesis:

- When unable to meet a patient's needs, the majority of pediatric dentists refer patients to institutions (hospital, university or academic based dental practices).
- Providers in rural areas are more likely to retain patients with SHCN within their practice as they are unable to successfully transfer care.

Study Design and Methods

A cross-sectional study was completed via an electronic survey distributed between February and April 2025. A 14-question survey was sent out via email to all active members of the American Academy of Pediatric Dentistry (AAPD). The survey captured data on practice type, geographic location, age range treated, transition patterns, and barriers. Descriptive statistics were used to summarize findings, with associations explored based on provider settings and location.

Acknowledgment

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Survey Results

Figure 1: Type of practice patients with SHCN are referred to

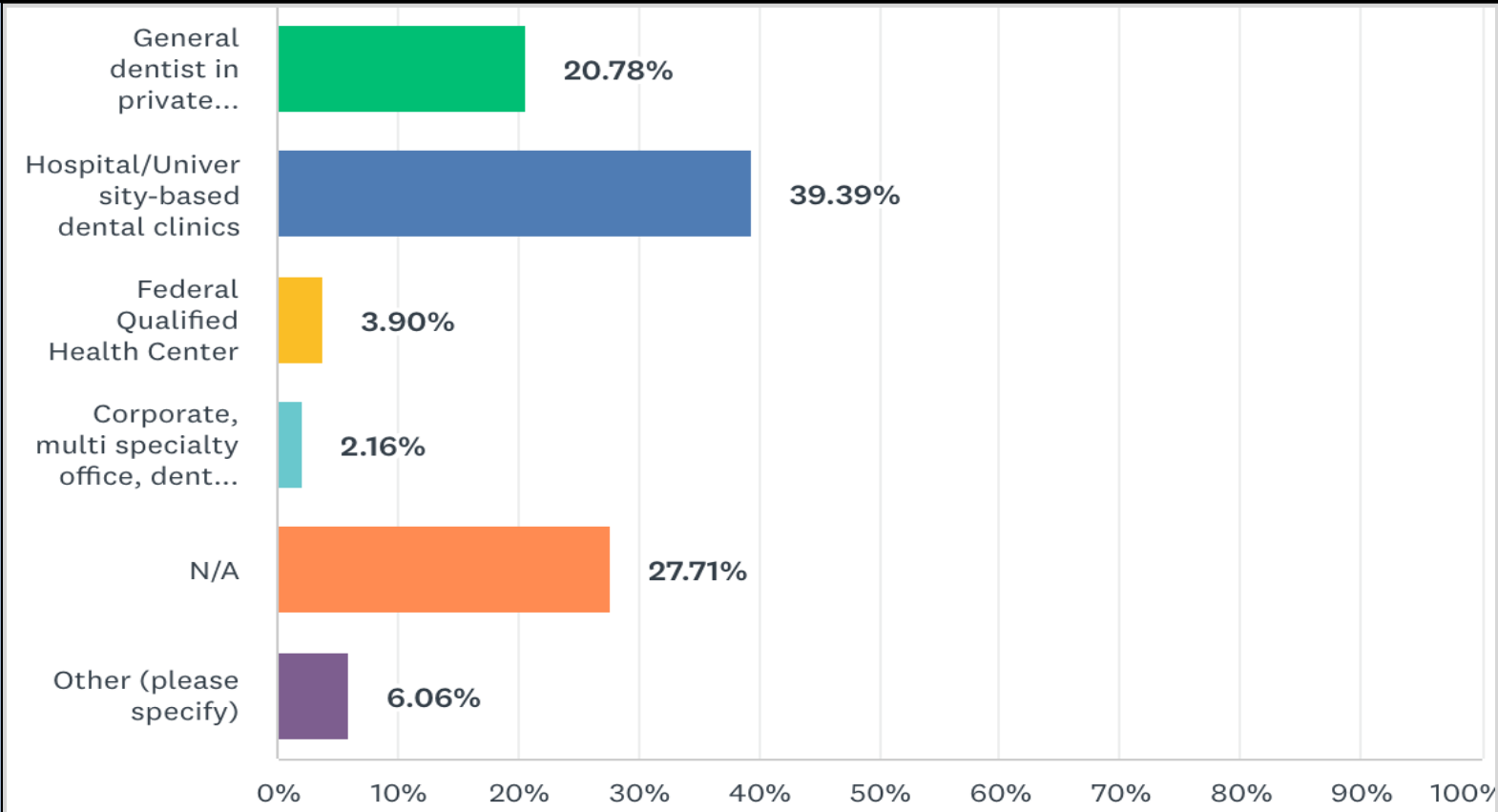


Figure 2: Reasons for referral of care for patients with SHCN

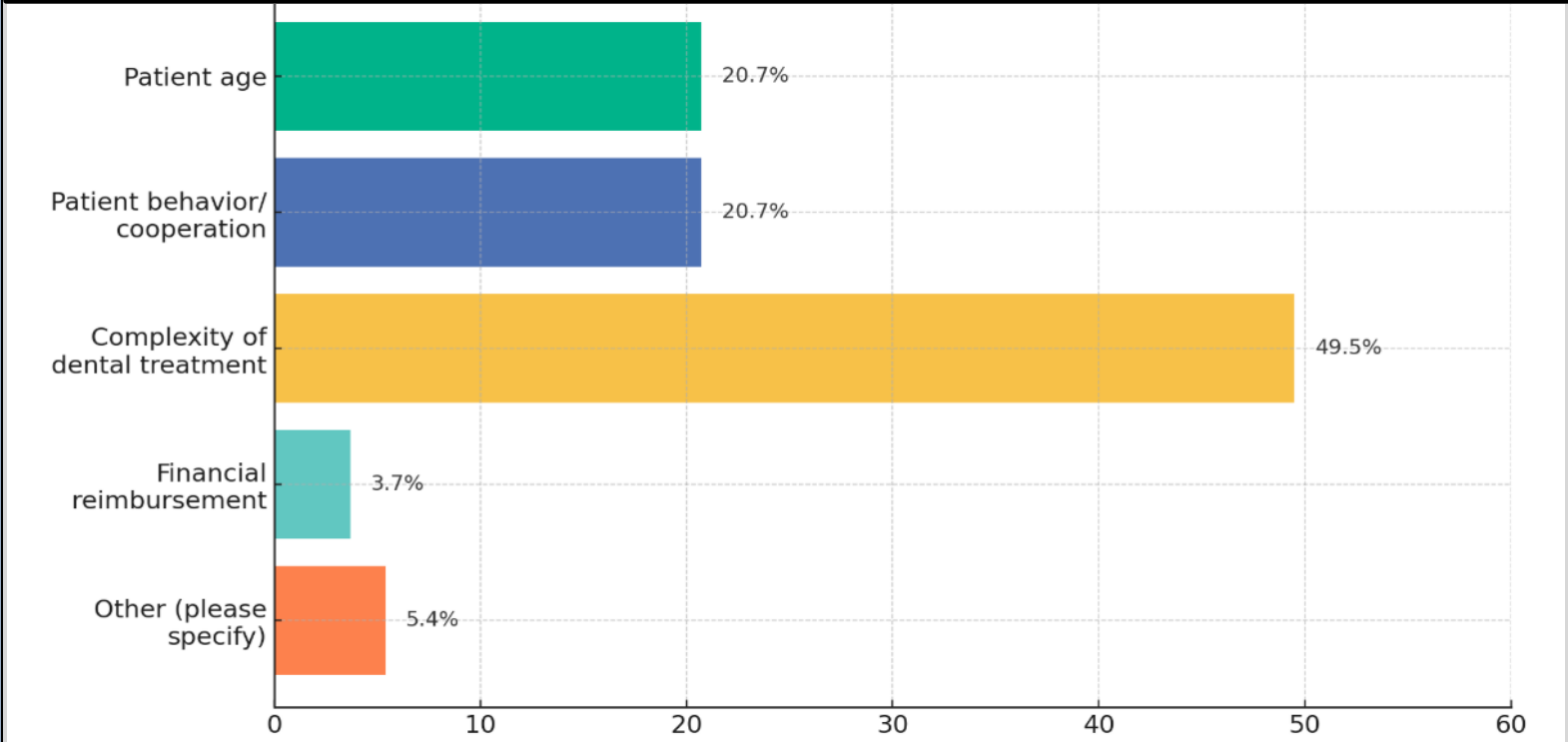
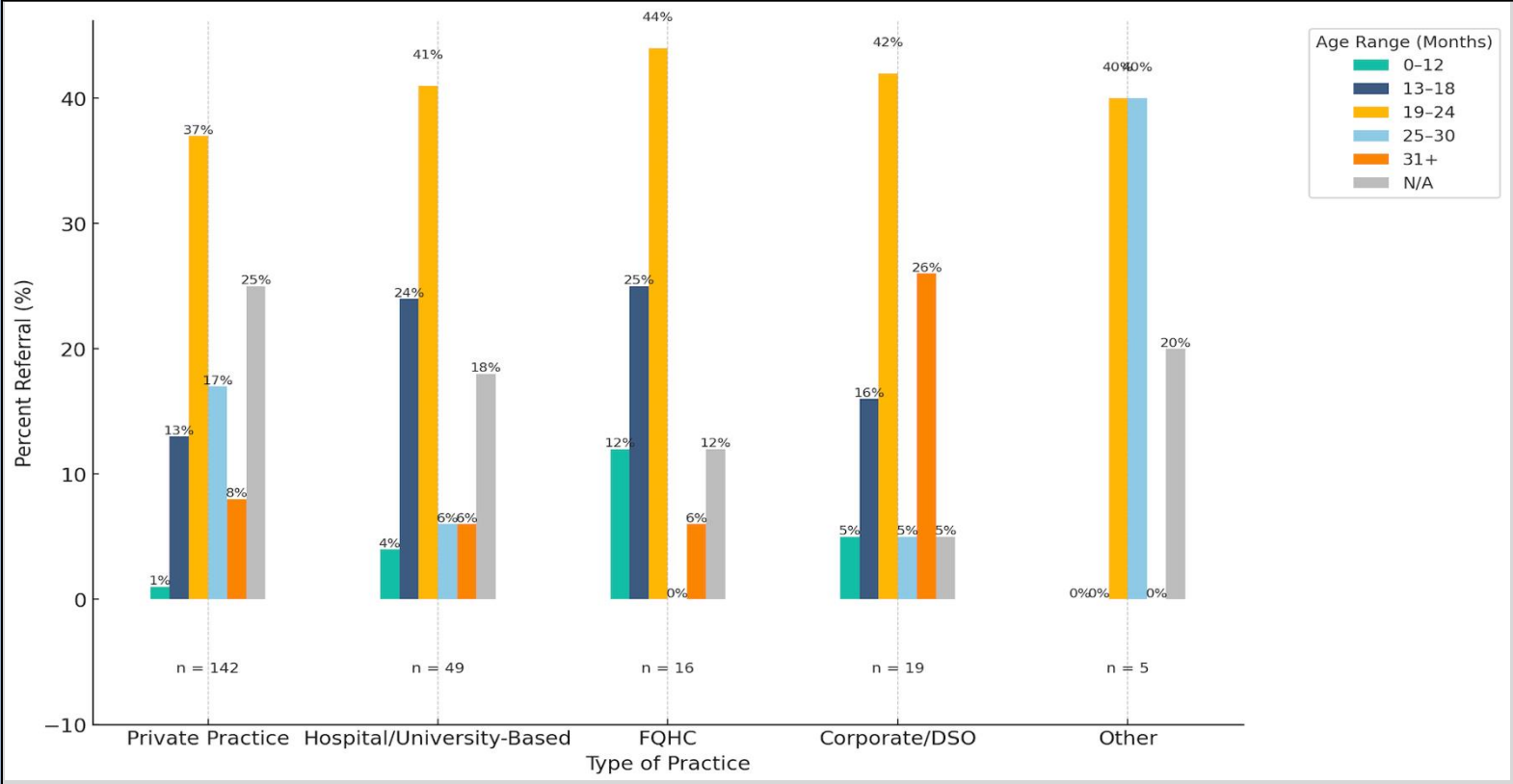
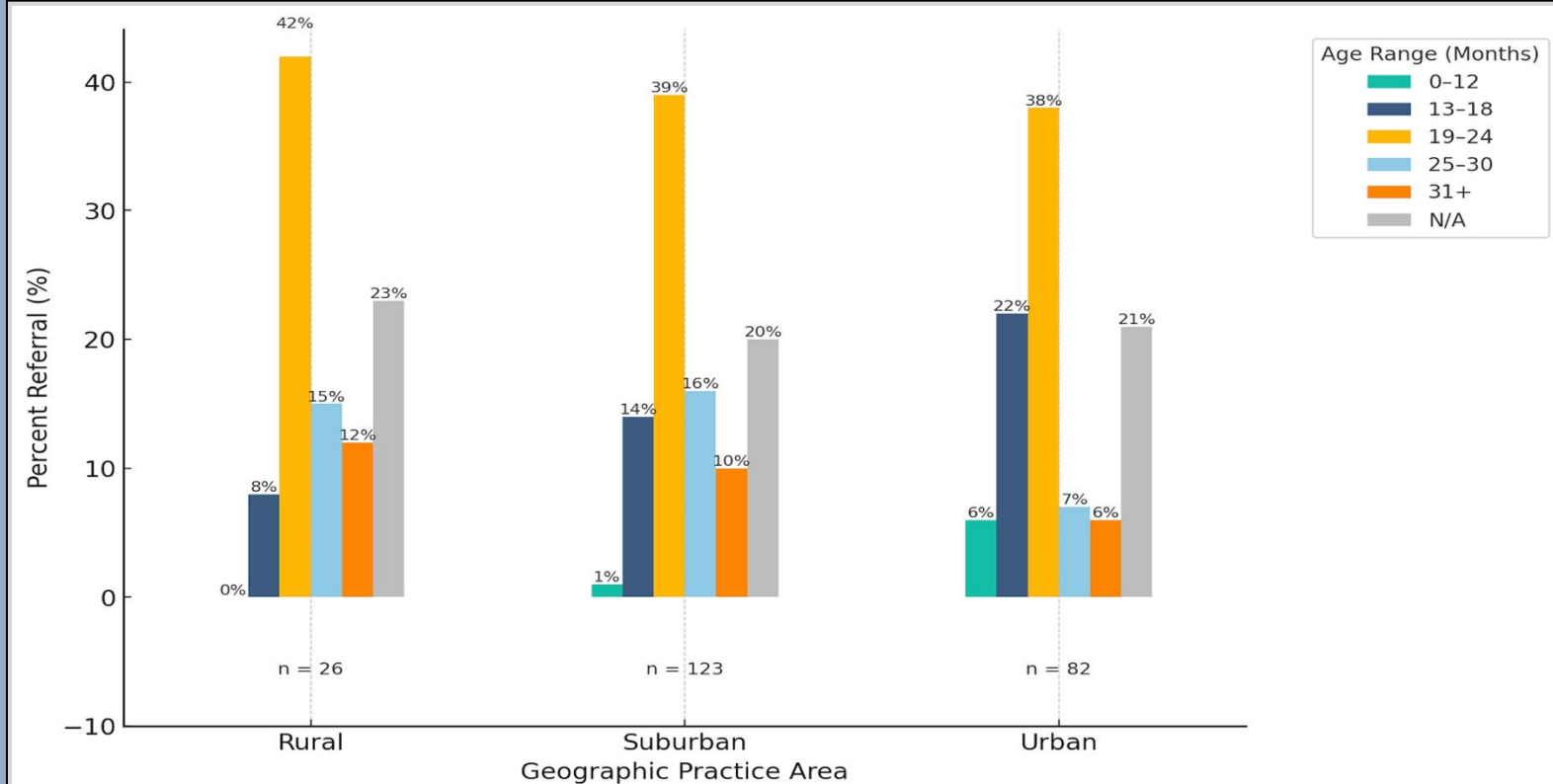


Table 1: Association between type of dental practice and age of referral



Results (cont.)

Table 2: Association between practice location and age of referral for patients with SHCN



Discussion

A total of 275 email responses were received from the 8155 surveyed active members of the American Academy of Pediatric Dentistry (AAPD), resulting in a 3.37% response rate.

The graph in figure 1 displays the type of dental practice patients with SHCN are referred to. The majority of referrals (39.39%) were directed to hospital/university-based dental clinics, underscoring the critical role that academic and hospital-affiliated institutions play in managing specialized cases. The second most selected response was "N/A" (27.71%), which likely reflects dental providers who do not refer out and serve patient populations for whom referral is not applicable. This sizable portion may signify a lack of structured transition pathways in some settings. Thirdly, approximately 20.78% of referrals were made to general dentists in private practice. Referrals to federally qualified health centers (FQHCs) and corporate or multi-specialty offices were notably low, at 3.90% and 2.16% respectively.

Figure 2 highlights the reasons for referral of care for patients with SHCN. The data revealed the complexity of dental treatment as the most cited reason, accounting for 49.5% of all referral-related considerations. The second-most common considerations were patient age and patient behavior/cooperation, each representing 20.7% of the responses. Less frequently cited were financial reimbursement (3.7%) and other factors (5.4%). Overall, the findings highlight that clinical complexity, patient behavior, and age are the primary reasons for SHCN referrals.

For Table 1, a chi-squared test of independence was conducted to assess the association between dental practice type and the age at which patients with special health care needs (SHCN) are referred. Percentages were calculated within each practice type, depicting how each provider type distributed its referrals across age groups. The statistically significant p-value of 0.019 indicates that the type of dental practice is significantly associated with the age at which patients with SHCN are referred for care. Pediatric dentists working in pediatric private practices, accounted for the largest sample size (n = 142), demonstrated a pattern of referring patients with SHCN in adolescent and young adult stages, with 37% of their referrals occurring at ages 19–24, 17% at ages 25–30, and 25% categorized as N/A, likely reflecting patients retained in ongoing or continuous care. In contrast, Hospital/University-Based practices (n = 49) seemed to have a relatively equal distribution, with the 41% of patients referred between the ages of 19-24. Smaller but notable trends also emerged among FQHCs (n = 16), corporate/DSO practices (n = 19), and other providers (n = 5).

FQHCs showed a strong concentration of referrals in early adulthood (44% at ages 19–24) but reported no referrals beyond age 25. Corporate practices had a similar peak at 42% in the 19–24 age range, and a limited number of patients transitioning past age 30. "Other" practice types also reflected a substantial number of transitional care around young adulthood (40% at both 19–24 and 25–30), though their small sample size limited broad generalization. Although the number of survey respondents per dental practice type differ, the overall trend indicates that the most common age of referral for patients with SHCN was between ages 19-24 years. This correlates with an important transitional period where patient needs evolve from pediatric and adolescent care into adult care.

Table 2 presents the distribution of age of referral for SHCN patients by geographic practice area. Each percentage reflects the proportion of referrals within that geographic group across age categories. Urban and suburban areas showed a strong concentration of referrals in the 13–24 age range, while rural practices were more varied and accounted for smaller overall referral volumes. The presence of outliers and a wider spread may reflect limited access to specialty care or less structured referral pathways in rural settings. Overall, the results show that geography plays a role in shaping the age at which SHCN patients are referred, though the differences were not statistically significant ($p = 0.186$).

Conclusion

This study found that when unable to meet a patient's needs, 39.39% of pediatric dentists refer patients with special health care needs (SHCN) to hospital/university-based dental clinics, supporting the first hypothesis. Due to the wide distribution of sample size collected for each practice type, it is difficult to determine whether dental providers from a specific practice type were more likely to render treatment to adult patients with SHCN. However, the average majority of survey respondents seem to refer patients with SHCN within the 19-24 age range, regardless of practice type. Lastly, survey responses indicated the pediatric dentists in rural locations on average, referred patients with SHCN at a later age compared to providers in urban and suburban areas. However, due to the significantly smaller sample size for rural populations, the results of the analysis should be taken with heed.

As the assessment of association was exploratory, caution must be exercised in interpreting results. These findings underscore the importance of establishing structured transition of care pathways for patients with SHCN, particularly as they age out of pediatric services. Additional research is needed to better understand barriers to transition of care, especially in underserved and rural settings, and to inform policies that support continuity of care across an individual's lifespan.

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