

INTRODUCTION

Access to pediatric dental care varies significantly between urban and rural areas due to workforce distribution. Rural regions face shortages of dental specialists, including pediatric dentists.¹ According to CDC, people living in rural America have 8% (children aged ≥ 2 y) to 10% (adults aged 18–64y) less access to dental services compared with their urban counterparts¹. A 2020 HRSA survey found preventive care was less common in small rural areas (74%) than in urban areas (80%)³. The 2017–2018 National Survey of Children's Health highlighted longer wait times for procedures, fewer fluoride treatments, and poorer overall dental health among rural children.^{4,5}

Dentists’ location choices are influenced by financial incentives and career growth, which may be more abundant in urban settings⁶. Additionally, urban areas may offer higher salaries, diverse cultural and educational experiences as well as better public transportation and to specialized care. Barriers to rural practice include professional isolation, limited infrastructure, spousal employment, and concerns about children’s education.⁷ The aim of this study was to determine the factors influencing pediatric dentists’ practice location.

METHODS

The study design is a cross-sectional study which consisted of a 17-item questionnaire sent out via email to members of AAPD (American Academy of Pediatric Dentistry) including residents, practicing pediatric dentists, academics, etc. The questionnaire assessed provider demographics, training, practice characteristics, payer modality, factors influencing practice location, awareness of rural dental needs, perceptions of resources and barriers to pediatric dental care. It was hosted by SurveyMonkey to meet security standards for the transmission of online data. Frequencies for each of the 17 questions were collected and summarized into relevant bars graphs. Cross tabulation and statistical significance were calculated to analyze each objective individually

RESULTS

8,532 invitations sent : 784 undeliverable/opted out ; 481 completed responses (6.2% response)/ 81 incomplete surveys excluded

Respondent Snapshot

- Urban: 376 / Rural: 105
- 61% have practiced 10+ years / 66% are board certified
- 84% work in or own a private practice / 76% accept Medicaid

RESULTS

Distribution of Pediatric Dentists Across Practice Settings by Age

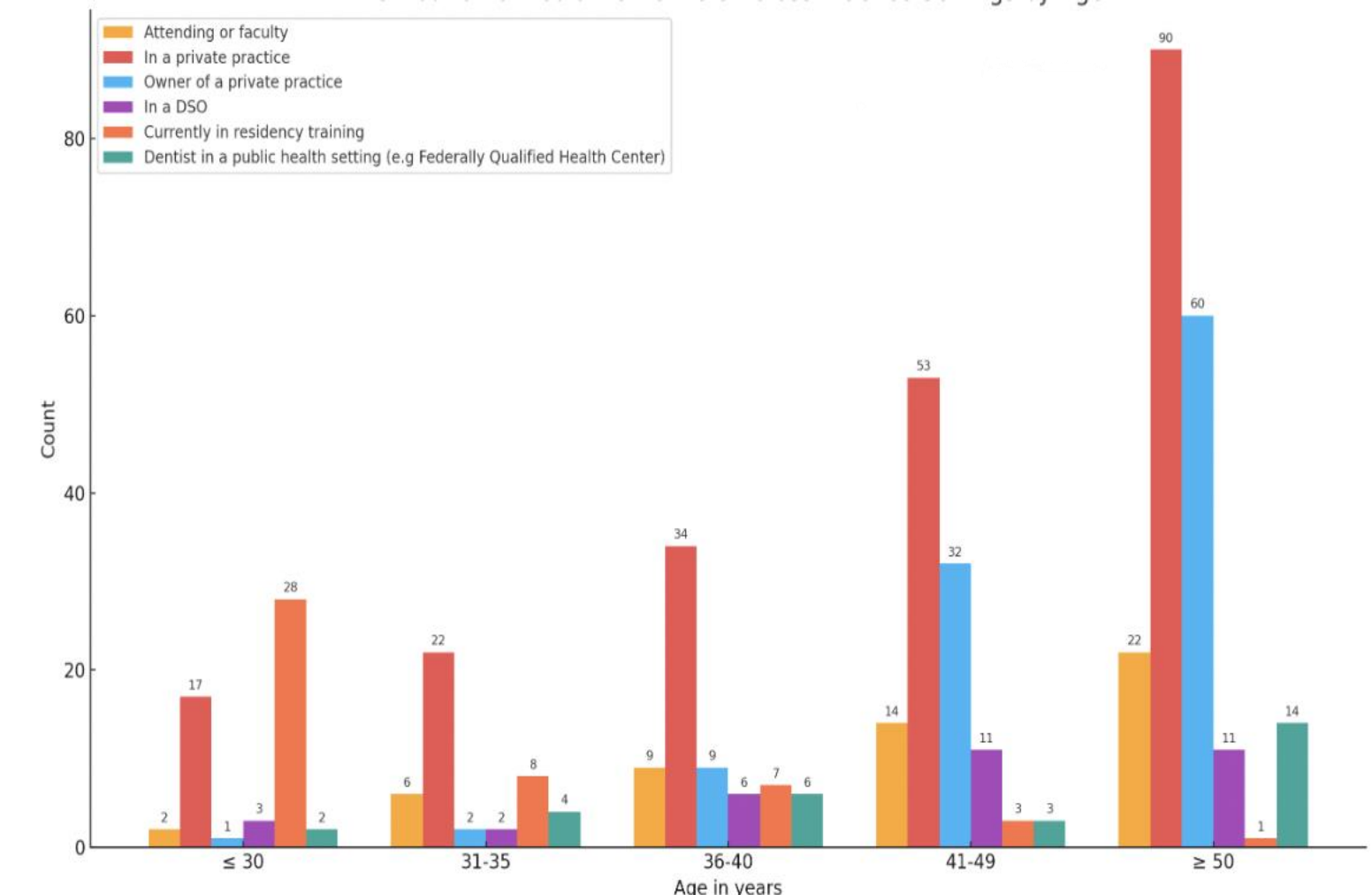


Figure 1. The data indicates a clear trend of increasing prevalence of private practice ownership among pediatric dentists as they advance in age. Current resident status is concentrated among younger dentist. Faculty roles and public health positions are also more prevalent amongst Senior Dentist, indicating a shift toward academia and service-based roles with age. Dental Service Organizations (DSOs) serve as an alternative practice setting for dentists across all age groups.

Barriers to Pediatric Dental Care by Practice Location Type

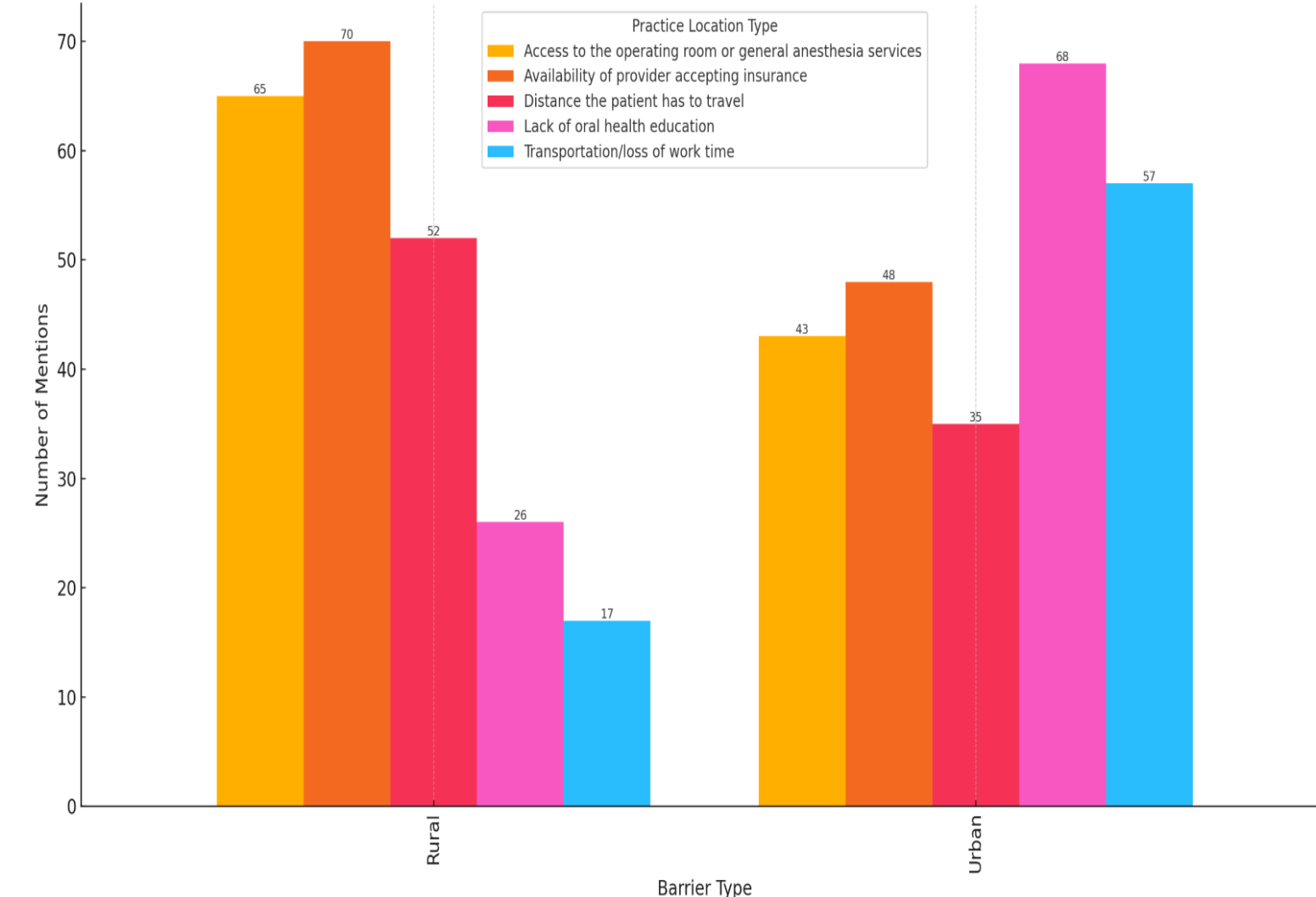


Figure 3. Rural providers most frequently cited issues with insurance acceptance, operating room/general anesthesia access, and travel distance. In contrast, urban providers reported higher concerns around oral health education and transportation/work time conflicts.

Pediatric Dentistry Practice Settings by Years of Experience

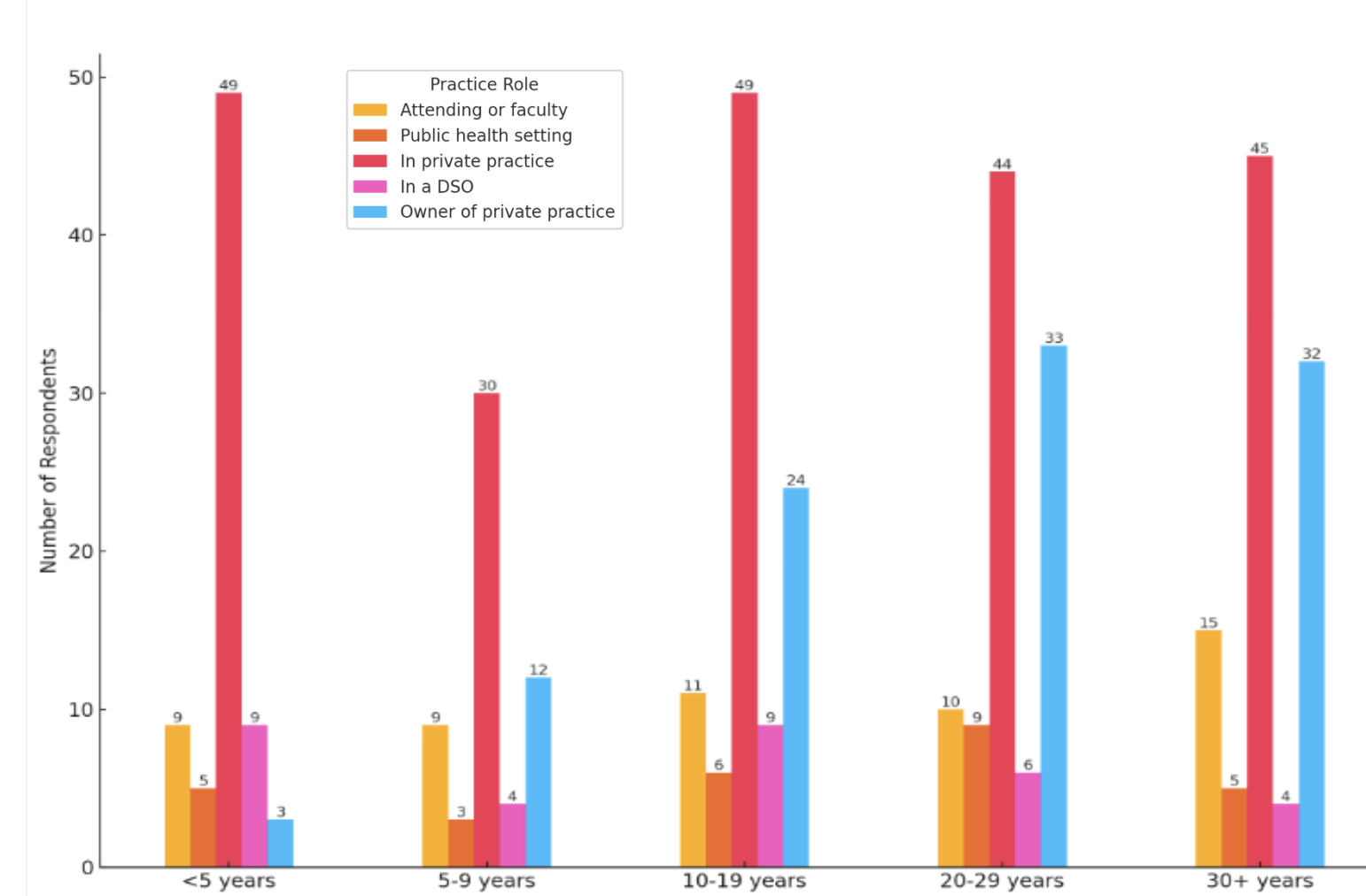


Figure 2. Private practice is the most common setting across all experience levels, especially in the <5 years, 10-19 years, and 30+ years groups. Ownership increases with experience, peaking in the 20-29 and 30+ years categories. Faculty/attending roles are present across all levels, with the highest in the 30+ years group. Public health positions are stable, peaking slightly in the 20-29 years range. DSO positions show modest, consistent presence in early and mid-career stages.

Lifestyle Factors Influencing Practice Location by Urban vs. Rural Dentists

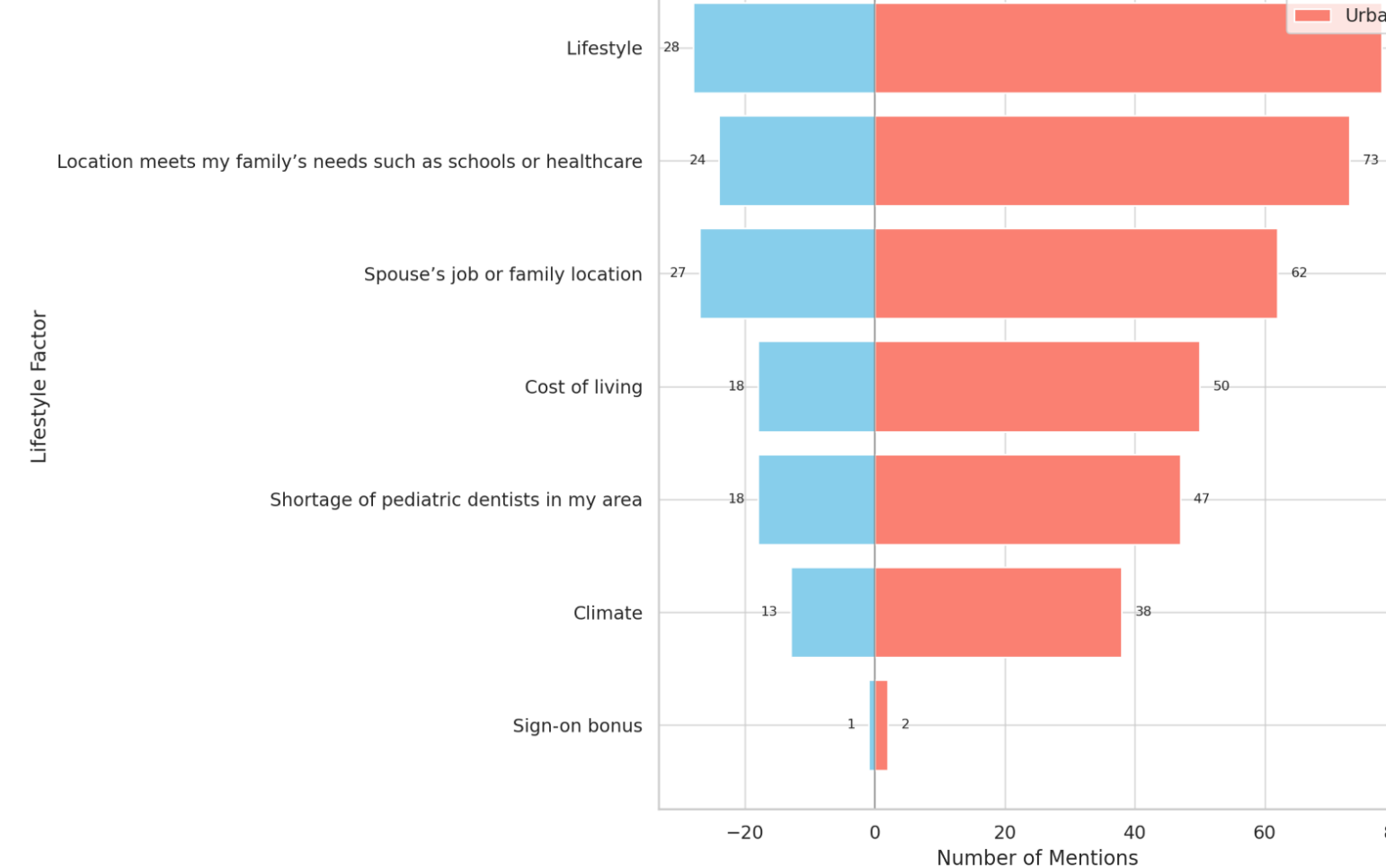


Figure 4. The horizontal bar chart illustrates the frequency with which urban and rural dentists mentioned specific lifestyle-related factors influencing their decision on practice location. The factors most frequently cited by both groups include "Lifestyle," "Location meets family's needs such as schools or healthcare," and "Spouse's job or family location." Conversely, "Sign-on bonus" was the least influential factor for both groups. Urban dentists consistently mentioned all listed factors more frequently than rural dentists, suggesting lifestyle considerations are more strongly weighted by dentists practicing in urban areas.

Medicaid Acceptance by Location: Urban vs. Rural

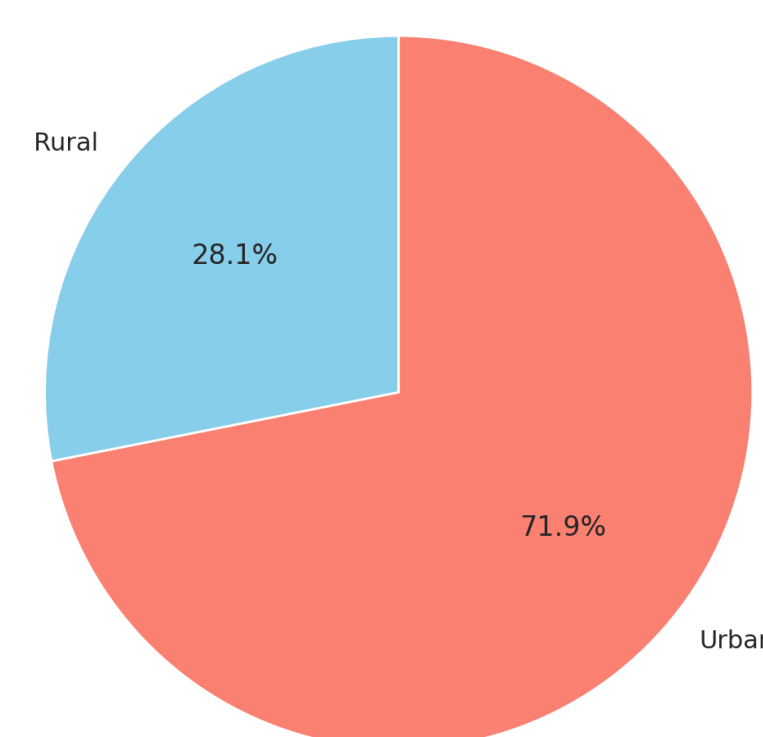


Figure 5. Medicaid acceptance by location, showing higher acceptance in urban (71.9%) compared to rural areas (28.1%).

DISCUSSION & CONCLUSION

A majority of pediatric dentists practice in **urban have**

- Greater professional opportunities

Rural dentists are more influenced by:

- Cost of living
- Shortage of local providers
- Climate and community need

Access disparities persist:

- 51% recognized high pediatric dental needs when choosing their location.
- Only 56% would choose a shortage area again, indicating challenges in long-term retention.
- 39% of providers serve <25% of patients from shortage areas.
- 37.8% of patients travel 6-10 miles for care, with 17.3% traveling over 20 miles.
- Rural areas face provider shortages, longer travel distances, and limited access to anesthesia services.
- Medicaid acceptance is significantly **lower in rural areas (28.1%)** vs. urban (71.9%)
- Urban providers report barriers such as:
 - Transportation/work conflicts
 - Limited oral health education among patients
- Findings support need for:
 - Financial and career incentives for rural practice
 - Improved infrastructure and support systems
 - Rural-focused recruitment and retention strategies
 - Improved Medicaid reimbursement rates or other incentives to improve acceptance rates

Limitations

- **Low response rate (6.2%)** may limit generalizability
- **Self-reported data** subject to bias
- **Survey distribution** limited to AAPD members
- **Cross-sectional design** does not assess trends over time
- The survey **did not assess longitudinal changes** in provider location preferences over time

REFERENCES/SURVEY

