



INTRODUCTION

- Teledentistry has the potential to increase access to dental care by enabling virtual care from a convenient location. Yet, little is known about the perceived barriers faced by families who have not previously used teledentistry. Prior research has focused primarily on the experiences of teledentistry users and dental providers.

- Benefits of Teledentistry:**

- Enables patients to receive virtual care from a convenient location.
- Reduces travel time and associated costs such as transportation, parking, and time off work or school.
- Particularly beneficial for patients with limited access to dental professionals or mobility issues that make in-person visits challenging.

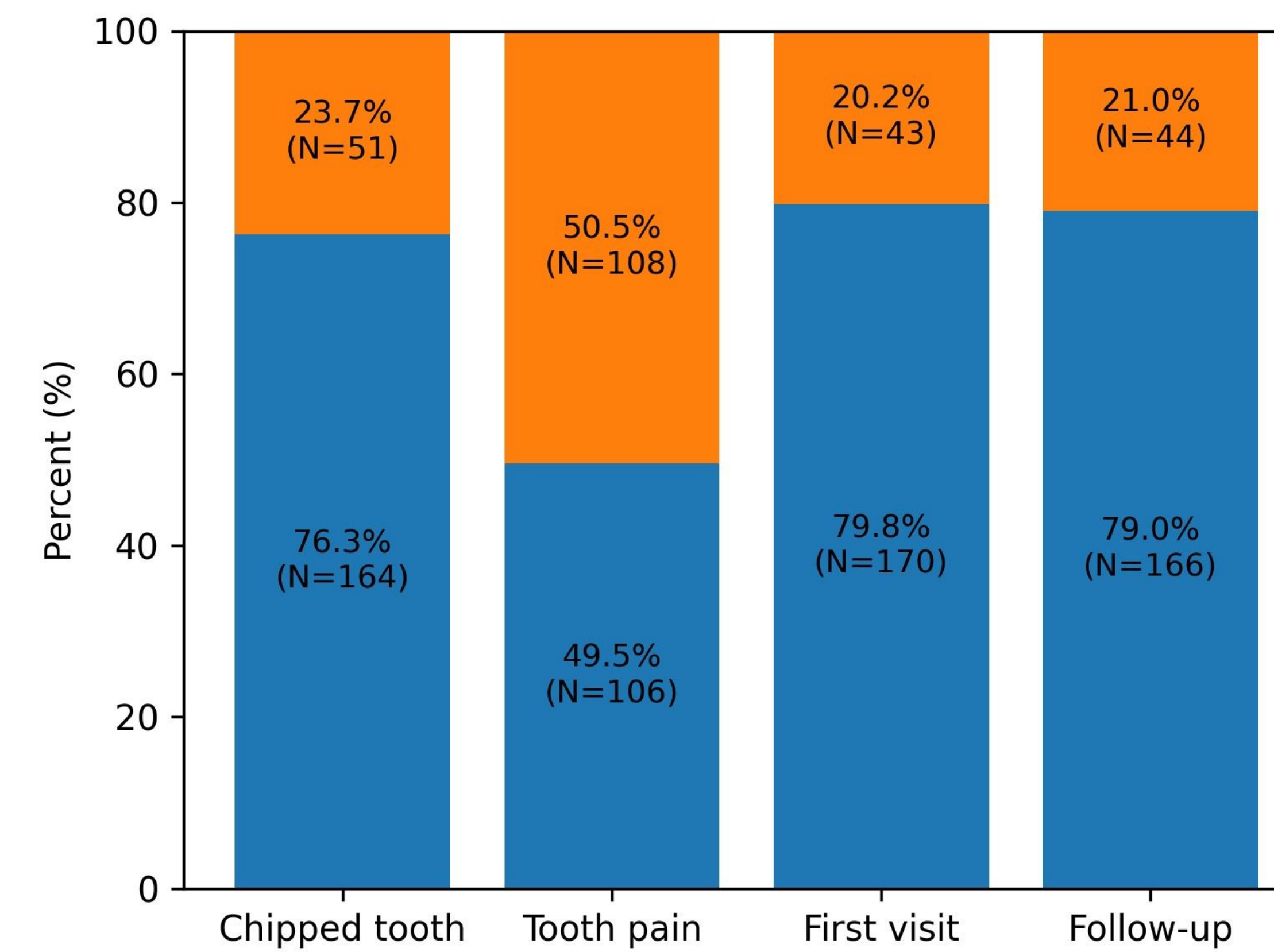
AIM: This study examined parents' willingness to use synchronous teledentistry and whether family/child characteristics were associated with parents' willingness by scenario type.

METHODS

- Design:** Cross-sectional, web-based survey (Qualtrics) (March - October 2025)
- Sample:** Parents age 18+; English or Spanish N=216
- Sites:** Case Western Reserve, Nationwide Children's Hospital, UCSF, UNMC.
- Dependent variable:** Parent willingness (yes/no) to use synchronous teledentistry across 4 scenarios: chipped tooth, tooth pain, first visit, and follow-up visit
- Independent variables:** Parent telehealth experience, parent education, travel time to clinic, child oral health status, primary home language, and parent telehealth experience.
- Analysis:** Descriptive, bivariate, and logistic regression statistics. Logistic regression estimated adjusted odds ratios (ORs) of parent willingness to use synchronous teledentistry.
- Synchronous teledentistry:** Live video visit between the parent/child and dentist

RESULTS

Figure 1: Parent Willingness to Use Synchronous Teledentistry by scenario



Percentages represent parents who indicated willingness (Yes (blue)/No (orange)) to use synchronous teledentistry for each scenario. Sample sizes varied by scenario (Chipped tooth N=215; Tooth pain N=214; First visit N=213; Follow-up N=210).

SUMMARY:

- Parents were willing to use synchronous teledentistry for the first visit (79.8%), follow-up (79.0%), chipped tooth (76.3%), and tooth pain (49.5%).
- In adjusted models, parents had higher odds of willingness when they traveled longer (chipped tooth, first visit), had a child with fair/poor oral health (first visit, follow-up), and had prior telehealth experience (first visit). Parents who did not speak English at home had lower odds of willingness for follow-up visits.
- Concerns about communication, relationship-building, and individualized care were the most common reasons for declining teledentistry across all scenarios, while diagnostic limitations and need for immediate care were specific to tooth pain.

DISCUSSION

- Parents were willing to use synchronous teledentistry for chipped-tooth, first-visit, and follow-up scenarios, but their willingness declined sharply for tooth pain.
- Parents with greater travel burden, children with poorer oral health, and prior telehealth experience had higher odds of accepting teledentistry, suggesting that perceived clinical need and familiarity may increase acceptability.
- Non-English-speaking parents had lower odds of accepting teledentistry for follow-up visits, suggesting that implementation may benefit from tailored engagement (e.g., awareness of available translation services)
- Clear pathways to definitive care are essential for symptomatic presentations like tooth pain.
- Hybrid models may best balance access with parent expectations.

CONCLUSION

Willingness to use synchronous teledentistry in pediatric dentistry varies by scenario type and family/child characteristics. Matching care delivery to clinical context, addressing language barriers through tailored engagement, and offering clear pathways to definitive care may help align teledentistry programs with family needs.

REFERENCES

Caivo, J. M., Glassman, P., Berens, L., Obadan-Udoh, E., & Stewart, R. E. (2021). Teledentistry: opportunities and recent developments in pediatric dentistry. *Journal of the California Dental Association*, 49(10), 641-647.

Lampe, A., Djalilova, S., Glassman, P., & Phillips, V. (2023). Improving Oral Health Using Teledentistry and Virtual Dental Homes: Concepts and Progress. *Journal of the California Dental Association*, 51(1), 2256035.

Tiwari, T., Diep, V., Tranby, E., Thakkar-Samtani, M., & Frantsve-Hawley, J. (2022). Dentist perceptions about the value of teledentistry. *BMC Oral Health*, 22(1), 176.

Menhadji, P., Patel, R., Asimakopoulou, K., Quinn, B., Khoshkhounejad, G., Pasha, P., ... & Nibali, L. (2021). Patients' and dentists' perceptions of tele-dentistry at the time of COVID-19. A questionnaire-based study. *Journal of dentistry*, 113, 103782.

Oktaviani, R. I., & Dewanto, I. (2022). Assessment of factors influencing the patient's perception of teledentistry services. *Scripta Medica*, 53(4), 315-320.

Maqsood, A., Sadiq, M. S. K., Mirza, D., Ahmed, N., Lal, A., Alam, M. K., & Halim, M. S. B. (2021). The teledentistry, impact, current trends, and application in dentistry: a global study. *BioMed research international*, 2021(1), 5437237.

Rahman, N., Nathwani, S., & Kandiah, T. (2020). Teledentistry from a patient perspective during the coronavirus pandemic. *British dental journal*, 1-4.



Figure 2: Flyer