

# Utilizing Teleconferencing as a Tool to Decrease the Missed Appointment Rate and to Establish a Dental Home for New Patients.



Jessica Lin, DMD, Jenny Liu, DDS, Meeta Grewal, DDS  
 NYU Langone Hospitals-Advanced Education in Pediatric Dentistry, Brooklyn, NY

NYU Langone Dental Postdoctoral  
 Residency Programs

## INTRODUCTION

The AAPD encourages the establishment of the dental home to promote positive health outcomes. Children with dental homes are more likely to receive individualized preventive and routine oral health care, which reduces the child's risk of preventable oral disease. New patient (NP) exams, which include interactions between patients, parents, and dentists, are crucial in establishing the dental home for patients. Teleconferencing may support the formation of a dental home and help ensure early and consistent dental care, particularly for patients facing barriers to oral health treatment, fostering a sense of familiarity and trust between providers, parents, and their children.

## PURPOSE

This study aims to implement teleconference encounters before NP exam appointments to decrease the missed appointment rate and to establish dental homes for new patients.

The purpose of this study is to explore how teleconferencing can be used to educate patients and parents on the importance of oral health, examine limitations of dental education outside of a dental office, and investigate barriers that lead to difficulties in obtaining available services, thereby supporting the formation of a dental home.

## METHOD

All new patients scheduled within the study time range from January 15, 2024 through March 26, 2024 were involved in the study. Patients scheduled within 48 hours, scheduling errors, those above 13 years old, and those with incomplete contact information were excluded. Parents of the scheduled patients were contacted within a week of their scheduled appointment, which involved two attempts in the preferred language of the parents. The study's control group comprised of patients whose parents did not utilize teleconference appointments or were unreachable. This control group was compared with patients whose parents agreed to participate in teleconference appointments. Data from teleconferences were recorded in EPIC for review prior to the NP exam, and teleconference utilization and no-show rates were analyzed to assess the impact of teleconferencing on appointment attendance.

## FIGURES AND DATA TABLES

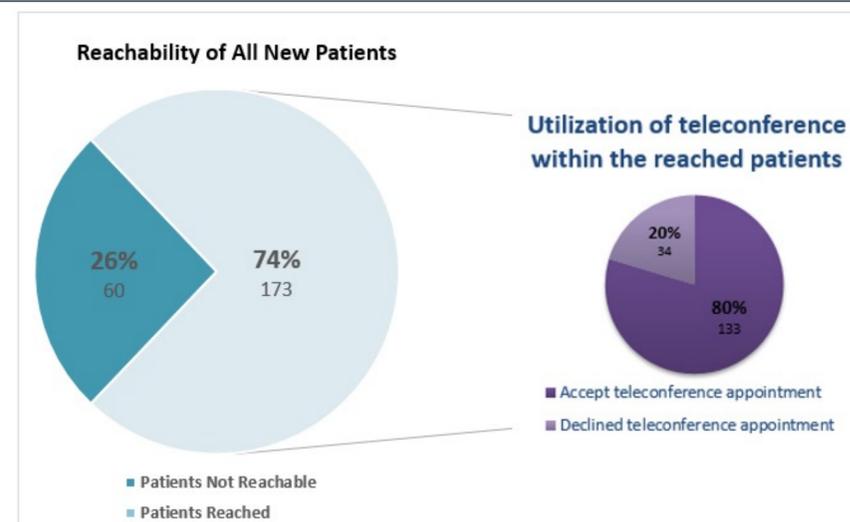


Table 1, New Patient Missed Appointment Rate

	N (Number of patients)		N (number of patients)	%
Utilization of teleconference (showed up to teleconference appointment)	139	Showed	107	77.0
		Missed	32	23.0
No utilization of teleconference	94	Showed	52	55.3
		Missed	42	44.7

Table 2, Data Analysis of Missed Appointment Rates of NP Exam

Teleconference Completed	Missed Appointment	Showed up Appointment	P Value
Yes	77%	23%	0.0008360322
No	55%	45%	

Table 3, Demographic Data and Summarized Table

Variable	Level	N %
Age (Years)		4.95
Gender	Male	57%
	Female	61%
Ethnicity	Alaska Native/American Indian	1%
	Pacific Islander/ Native Hawaiian	0%
	Hispanic	49%
	Middle Eastern or North African	6%
	White	13%
	Black/African American	7%
	Asian	13%
Primary Language	Other	1%
	Did not disclosed/ No Info	7%
	English	33.0%
	Spanish	48.1%
	Chinese	11.6%
	Other	7.3%
	Interpreter Utilized	Yes
No		33.0%
Teleconference	Utilized	59.7%
	Declined/Did not pick up	40.3%
New Patient Appointment	Showed Up	68.7%
	Missed	16.7%
	Cancelled	14.6%
Insurance	Commercial	0%
	Medicaid	100%
	No-coverage/Self-pay	0%
	Other	0%
Total NP Scheduled		233

## RESULTS

The total number of scheduled new patients within 10 weeks was 273. 40 Patients were excluded due to not meeting criteria for inclusion. The total number of scheduled NP exams that met inclusion criteria was 233.

Out of this group (233), 173 parents were reached. The percentage of reachability was 74.2%. Of the 173 parents reached, 133 (80.3%) parents utilized teleconference.

When the parents utilized teleconference, 107 patients (77%) showed up to their NP exam, and **32 patients (23%) missed** their NP exam. Of the parents that did not utilize teleconference, 52 patients (55.3%) showed up to their NP exam, and **42 patients (44.7%) missed** their NP exam.

The missed appointment rates were compared between the following two groups: utilization of teleconference and no utilization of teleconference. The results showed a p-value of 0.0008, showing that there is a statistically significant difference when teleconferences are utilized.

## CONCLUSIONS

Based on the results of this study, the following conclusions can be drawn: Implementing teleconference encounters prior to NP exam appointments can reduce the missed appointment rate and facilitate the establishment of dental homes for new patients. During the teleconference, parents are able to establish contact with the providers, which can help to remove hesitancy barriers and increase their commitment to present to their appointments. Based on our findings, we speculate that teleconferencing may help reduce parental anxiety about NP visits by answering questions and establishing rapport and trust with the providers. Teleconferencing may consequently enhance the utilization of dental services, thereby reducing disparities in oral health. Other uses for teleconferencing in dental settings are pre-operative and post-operative visits for GA and sedation, oral hygiene instructions and verifying home care compliance, follow up for limited orthodontic treatments, screening for emergency visits, and addressing any dental concerns of parents.

## REFERENCES

American Academy of Pediatric Dentistry. Definition of dental home. The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry; 2023:16.  
 American Academy of Pediatric Dentistry. Policy on the dental home. The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry; 2023:35-7.