

# Synchronous Teledentistry in a Pediatric Dentistry Clinic: Impact on Access to Care

Sofía Iribarren<sup>1</sup>, Julie C. Reynolds<sup>1</sup>, Kecia S. Leary<sup>1</sup>, Amy B. Lesch<sup>1</sup>, John J. Warren<sup>1</sup>, Sean McLaren<sup>2</sup>, Tabitha K. Peter<sup>1</sup>

<sup>1</sup>The University of Iowa, College of Dentistry and Dental Clinics, Iowa City, IA, <sup>2</sup>University of Rochester, Eastman Institute for Oral Health, Rochester, NY

Sofia-iribarren@uiowa.edu

#### Introduction

Teledentistry use aims to improve access by reducing barriers related to distance and time. Few studies have evaluated the impact of teledentistry on access to dental care.

#### Methods

- Data source; retrospective chart review between July 1st, 2020, and June 4th, 2021
- Dependent; treatment completion
- Independent; teledentistry (Y/N)
- Covariates; age, distance, sex, SHCN, insurance
- Bivariate analysis: Fishers exact test

## How is Teledentistry Used?

A live video consult allows the parent/child to complete an initial exam without physically coming to the clinic for the initial visit.

### **Goals Of Teledentistry**

- Address concerns
- Behavioral assessment
- Develop a treatment plan
- OHI and anticipatory guidance

### Study Sample

- Inclusion; 1-17 yo, who completed a new patient exam via teledentistry (experimental) or traditional (control) and returned for a subsequent visit (in-person) to initiate treatment.
- Exclusion; no treatment needs, referrals to different clinics, emergency consults, patients treated by faculty or dental students, GA-post operative visits.

### Results

Rates of treatment plan completion were similar among children seen for a new patient exam via teledentistry or in-person.

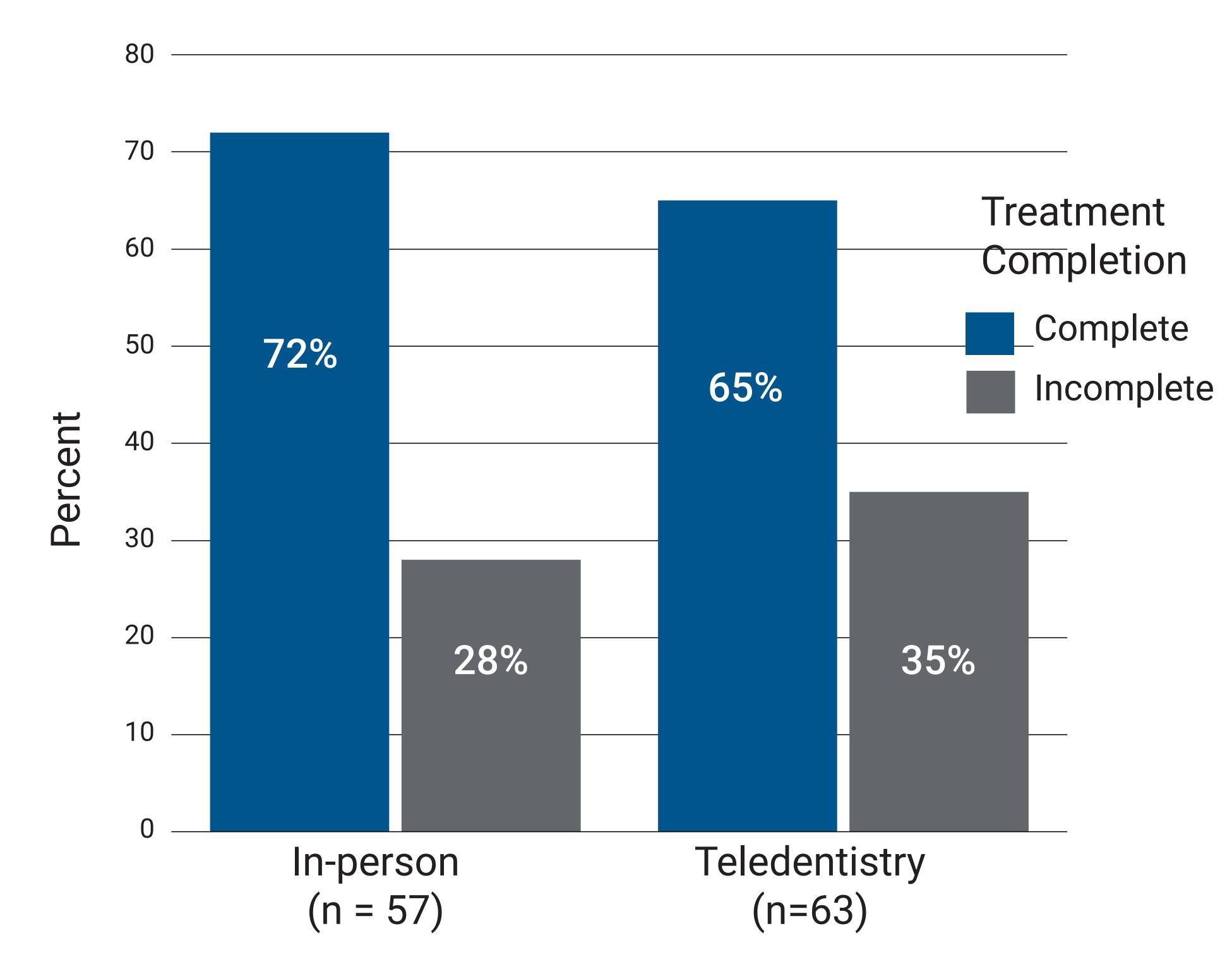


Figure 1. Treatment plan completion among patients seen via TD vs. in-person, p=0.439

Table 1. Bivariate analysis of the **teledentistry group** and all predictors.

	Complete (N=41)	Incomplete (N=22)	Total (N=63)	p value
Age (yrs)				0.717
Mean (SD)	5.6 (2.5)	5.9 (2.2)		
Age Category				0.326
0-3 years	6 (15%)	2 (9.5%)	8 (13%)	
4-6 years	27 (66%)	12 (54%)	39 (62%)	
7-17 years	8 (19%)	8 (36%)	16 (25%)	
Sex				0.432
Female	18 (44%)	12 (57%)	30 (48%)	
Male	23 (56%)	9 (42%)	32 (52%)	
Insurance				1.0
Medicaid/Hawk-I	29 (72%)	16 (73%)	45 (72%)	
Private	11 (27%)	6 (27%)	17 (27%)	
Behavioral/Neuro Health History				0.870
No	36 (88%)	19 (86%)	55 (87%)	
Yes	5 (12%)	3 (14%)	8 (13%)	
Distance category	, , , ,		Ţ	0.226
< 50 miles	6 (15%)	3 (14%)	9 (14%)	
50 - 99 miles	21 (51%)	15 (71%)	36 (58%)	
100 + miles	14 (34%)	3 (14%)	17 (27%)	

Table 2. Bivariate analysis of the in-person group and all predictors.

	Complete (N=41)	Incomplete (N=16)	Total (N=57)	p value
Age (yrs)				0.128
Mean (SD)	5.8 (2.5)	7 (3.0)		
<b>Age Category</b>				0.625
0-3 years	5 (12%)	1 (6.3%)	6 (10%)	
4-6 years	23 (56%)	8 (50%)	31 (54%)	
7-17 years	13 (31%)	7 (44%)	20 (35%)	
Sex				0.860
Female	22 (54%)	9 (56%)	31 (54%)	
Male	19 (46%)	7 (44%)	26 (46%)	
Insurance				0.109
Medicaid/Hawk-I	25 (64%)	14 (36%)	39 (71%)	
Private	14 (87%)	2 (12%)	16 (29%)	
Behavioral/Neuro Health History				0.483
No	33 (80%)	11 (69%)	44 (77%)	
Yes	8 (19%)	5 (31.1%)	13 (23%)	
Distance category				0.260
< 50 miles	8 (19%)	1 (6.3%)	9 (16%)	
50 - 99 miles	27 (66%)	14 (87%)	41 (72%)	
100 + miles	6 (15%)	1 (6.3%)	7 (12%)	