

## Introduction

Oral health is an important part of overall health and well-being.<sup>1</sup> However, oral health neglect is a global issue with dental caries being the most common chronic disease in childhood. In addition, very young children are more prone to dento-alveolar trauma due to their limited motor skills.<sup>2</sup> The AAPD recommends the establishment of a dental home with the eruption of the first primary teeth.<sup>3</sup> Interprofessional collaborative efforts have led to the institution of oral health risk assessment and intervention at well child pediatrician visits to help address the global issue of oral health neglect.<sup>4</sup>

## Aim

Our aim is to examine the time interval for children who were referred to a dentist by UTMC pediatricians at well child visits to establish a dental home.

## Material & Methods

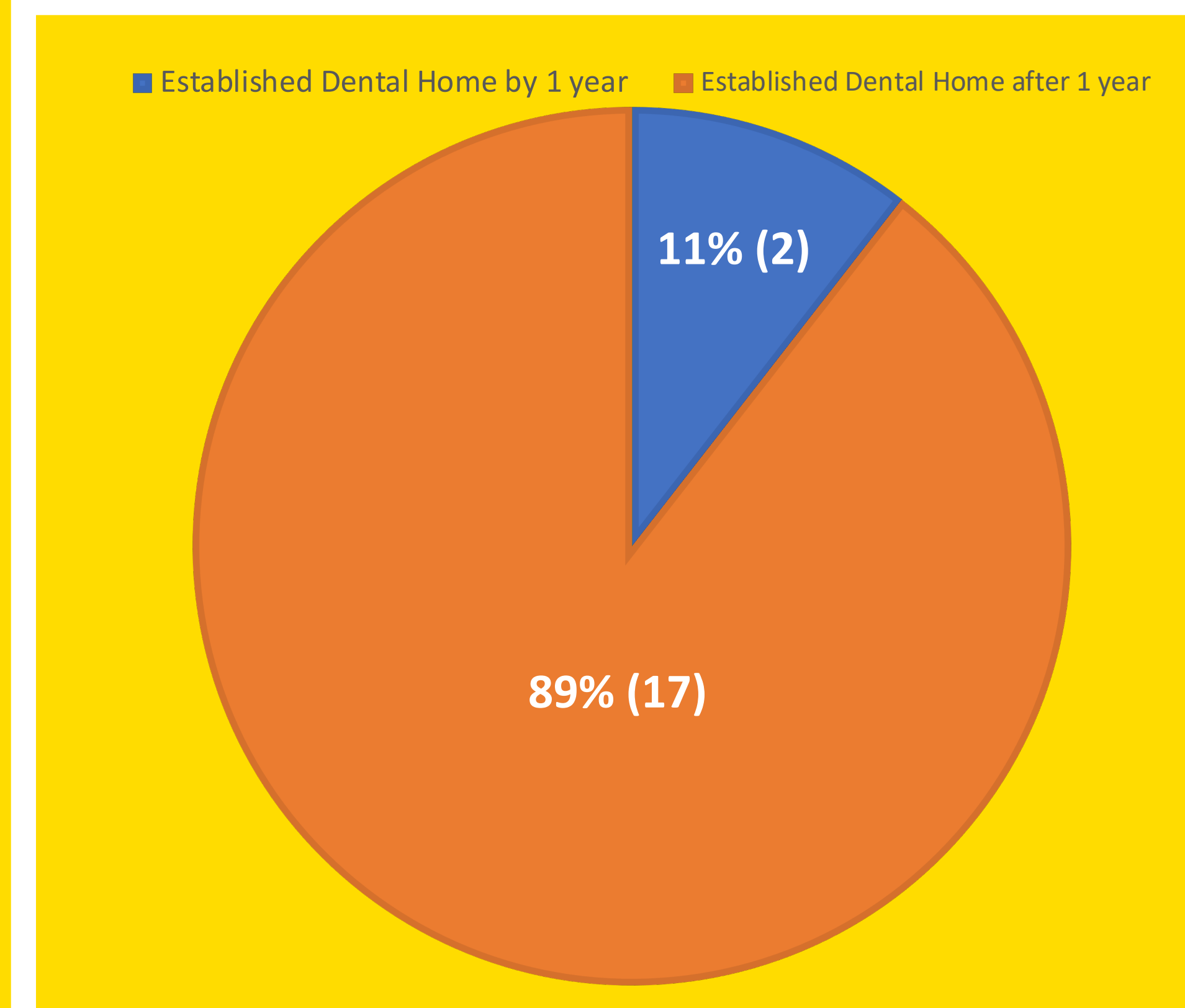
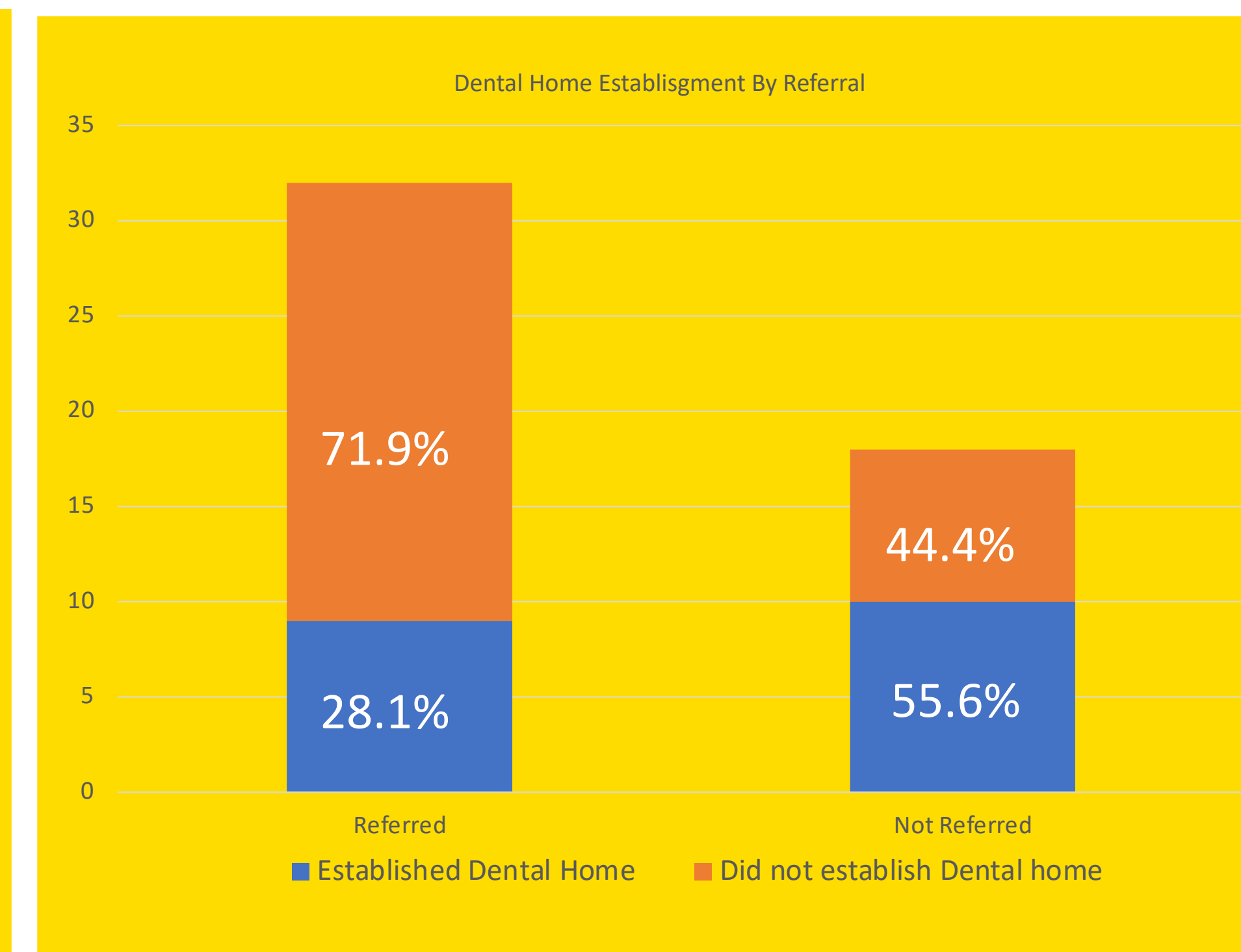
A data base search was done in Athena using the key words – “well child visit, “ages 6 months to 36 months”, “January 31, 2020, to July 31, 2022” . A total of 234 patient electronic records were obtained and 50 were randomly selected for this research. Each chart was reviewed, the necessary data extracted and recorded on an excel spreadsheet. Statistical analysis was completed using Stata version 17.0 (StataCorp, College Station, Texas).

## Results

This retrospective study analyzed data from 50 patients obtained via Athena software chart review from the Ruppert Medical Center Pediatric Medicine Clinic of the University of Toledo between January 31, 2020, to July 31, 2022. Data used were obtained from well child visits. Chi-square analysis showed no statistically significant difference in baseline characteristics between patients who established a dental home and those who did not after referral by UTMC pediatricians by sex (P=0.608), race (P=0.648, ASA classification (P=0.054), city of residence (P=0.729) or by referral (P=0.055). The average mean age of establishing a dental home was at 20.8(6.03) months. Of the 50 participants, 26 were males and 24 were females. The following are the breakdowns by race; 66% Black, 12% White, 22% Other (Spanish American Indian, Middle Eastern or Northern African, Asian Indian).

## Results

	Established Dental Home 19(38%)	Did not establish Dental home 31(62%)	p-value
<b>Sex</b>			0.608
Male n (%)	9 (34.6)	17 (65.4)	
Female n (%)	10 (41.7)	14 (58.3)	
<b>Race n (%)</b>			0.648
Black	14 (42.4)	19 (57.6)	
White	2 (33.3)	4 (66.7)	
Other	3 (27.3)	8 (72.7)	
<b>ASA Classification</b>			0.054
ASA I n (%)	3 (18.8)	13 (81.3)	
ASA II n (%)	16 (47.1)	18 (52.9)	
<b>City of Residence n (%)</b>			0.729
Toledo	18 (40)	27 (60)	
Maumee	1 (50)	1 (50)	
Sylvania	0	1 (100)	
Holland	0	1 (100)	
Detroit	0	1 (100)	
<b>Referred to Dental Home</b>			0.055
Yes n (%)	9 (28.1)	23 (71.9)	
No n (%)	10 (55.6)	8 (44.4)	



Age of establishing dental home Mean (standard deviation): 20.8 (6.03)  
Time to establishing dental home in months. Mean (standard deviation): 7.5 (3.8)

## References:

- Heilmann, A., Tsakos, G., & Watt, R. G. (2015). Oral health over the life course. *A life course perspective on health trajectories and transitions*, 39-59.
- De Young, A. C., Kenardy, J. A., & Cobham, V. E. (2011). Trauma in early childhood: A neglected population. *Clinical child and family psychology review*, 14, 231-250.
- American Academy of Pediatric Dentistry. Definition of dental home. *The Reference Manual of Pediatric Dentistry*. Chicago, Ill.: American Academy of Pediatric Dentistry; 2022:15.
- Díaz-García, I. F., Hernández-Santos, D. M., Olmedo-Sánchez, A. B., & Nápoles-Salas, L. E. (2023). Perspective Chapter: Oral Health and Community Prevention in Children.

## Results

A total of 19 (**38%**) children; 9 (34.6%) males and 10 (41.75) females, established a dental home and 31 (62%) children; 17 (65.4%) males and 14 (58.3%) females, did not. Approximately 32 (**64%**) children were referred and 18 (36%) were not. Out of those referred, 9 (28.1%) established a dental home and 23 (71.9%) did not. Out of those who were never referred, 10 (55.6%) established a dental home. Overall, only 11% of those who established a dental home did so by their first birthday with 89% establishing a dental home after age 1 year.

## Discussion

Our findings show an overall larger proportion of children; 31 (62%) - 17 (65.4%) males and 14 (58.3%) females, did not establish a dental home in this period (January 31, 2020, to July 31, 2022). For children who established a dental home; 19 (38%), a larger proportion did not meet the AAP/AAPD guidelines of dental home establishment which is recommended to be done latest by a child's first birthday; 16.91 (89%). Very few of the children that were referred by UTMC Pediatricians to establish a dental home did in the time frame of this chart review; 9 (28.1%), whereas a higher number of children that were never referred reported having established a dental home; 10 (55.6%). Establishment of a dental home in this study was found not to be influenced by sex, race, ASA classification, city of residence or by referral.

## Conclusion

Further research is indicated to find more effective ways by which dental home establishment can be encouraged among children to meet the AAP/AAPD guidelines by UTMC pediatrician and by extension all pediatrician. Our analysis could not prove the effect of insurance type of dental home establishment since almost all the participants in this research had Medicaid insurance and there were no comparable groups. Based on the findings from this study, sex, race, ASA classification, city of residence or even referral have no significant effect on the establishment of a dental home. Some reasons for the higher numbers of establishment of a dental home among those who were not referred could be explained by the smaller sample size, the presence of severe dental disease or inaccurate charting.